

AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RE- LATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2012

THURSDAY, MARCH 17, 2011

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 1:58 p.m., in room SD-124, Dirksen
Senate Office Building, Hon. Herb Kohl (chairman) presiding.
Present: Senators Kohl, Pryor, Brown, Blunt, and Moran.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

FOOD AND DRUG ADMINISTRATION

STATEMENT OF DR. MARGARET A. HAMBURG, COMMISSIONER

ACCOMPANIED BY:

**PATRICK McGAREY, ASSISTANT COMMISSIONER FOR BUDGET,
FOOD AND DRUG ADMINISTRATION
NORRIS COCHRAN, DEPUTY ASSISTANT SECRETARY FOR BUDGET,
DEPARTMENT OF HEALTH AND HUMAN SERVICES**

OPENING STATEMENT OF SENATOR HERB KOHL

Senator KOHL. We will come to order right now and start this hearing.

Today's hearing will focus on the fiscal year 2012 budget request of the Food and Drug Administration (FDA). We would like to welcome Commissioner Hamburg, as well as Mr. Patrick McGarey and Mr. Norris Cochran. It is very good to have you guys here with us.

The FDA budget request for this fiscal year includes an increase of \$385 million, or 14 percent, more than the funding level provided in fiscal year 2010. During a time when overall Government spending is declining, this budget request is an exception. Among other things, we are here to talk about why this increase is necessary.

Some people have questioned the role of the FDA and the growth of the agency's budget over the past several years. These are fair and important questions. I have been and continue to be a very strong supporter of the FDA. At the same time, I understand how difficult it is to talk about deficit reduction while at the same time defending such a large increase in the budget. Justifying that increase, Dr. Hamburg, is your task and it is not an easy one.

We have supported your work because we believe it is the job of the Federal Government to make sure that our food and drugs are

safe, and we need to make sure that you have the funding that you need to make that happen. This is not something we can relegate to States, local government, or private industry. The world and the way our food and drugs are produced are becoming more complex every day, and it is important for the FDA to have the ability to adapt to these changes.

Every \$1 that we spend in this bill must be questioned, of course, defended, of course, and well thought out. The administration has proposed to increase this budget while other areas of the Government are being cut. I believe the FDA's mission is critical to the safety of American families, but we must be able to justify the budget increase at this time.

So, we are looking forward to hearing from you, and first we will call on Senator Blunt.

STATEMENT OF SENATOR ROY BLUNT

Senator BLUNT. Thank you, Chairman Kohl, for holding this hearing on FDA and their budget request for fiscal year 2012. I know you have been a knowledgeable advocate for this work and look forward to your leadership on it.

I want to thank our witnesses for coming today as well.

The administration's request for FDA is an increase of 16 percent more than the current funding level, and if the budget request is approved, the agency will grow by an astonishing 60 percent since fiscal year 2008. This is one of the largest increases in the entire Department of Health and Human Services (HHS) and it is a higher percentage increase than in almost any agency in the U.S. Department of Agriculture (USDA).

As I mentioned at last week's hearing with Secretary Vilsack and earlier this week in a meeting I am pleased the Commissioner was able to have with me in anticipation of this hearing, I am concerned about the fragmentation among the food agency inspection services and hope we can look for ways to streamline wherever we can. I think it was Einstein who said everything should be as simple as possible but no simpler. So, we do not want to streamline it to the point that it does not work, but we do want to look for those efficiencies that we are able to find. According to the Government Accountability Office report released earlier this month, 15 Federal agencies are responsible for oversight of 30 food-related laws. It is important we look for ways to do what we can about duplication where it occurs.

The recent outbreak of salmonella in eggs showcased this fragmentation. Currently, the FDA has the responsibility of ensuring the safety of shell eggs, yet USDA oversees eggs that are processed into egg products. The Secretary himself used the example of a pepperoni pizza that is under the jurisdiction of one agency while cheese pizza is under the jurisdiction of another.

With significant investments, Dr. Hamburg, comes significant responsibility. I know you want your agency to be accountable and we do too. We cannot look at this budget without understanding that the Federal Government is borrowing \$4 billion every single day. Families all across America do not understand why their Government cannot operate with the same rules they face, and the

Government must start living within its means. So, I am looking forward to what we can do together to address these issues.

As we tackle funding decisions this year, we have to be mindful, of course, that the FDA touches the lives of every American every day, and amazingly around 20 cents out of every \$1 spent in America is used to purchase an FDA-regulated product. Americans expect these products to be safe and effective. Dr. Hamburg, I look forward to working with you and your team and certainly with Chairman Kohl as we move down the path to doing the things that make the most sense for the job you have to do.

And thank you, Chairman.

Senator KOHL. Thank you very much, Senator Blunt.

Commissioner Hamburg, we would love to hear from you.

SUMMARY STATEMENT OF DR. MARGARET A. HAMBURG

Dr. HAMBURG. Thank you very much, Chairman Kohl, Ranking Member Blunt, and distinguished members of this subcommittee. I appreciate the opportunity to present the President's fiscal year 2012 budget for FDA and our priorities for the coming year.

This hearing comes at a critical time for our Nation and for our agency. We must be prepared to meet and fully embrace the scientific challenges and global realities of our modern world, and the stakes for public health, for patients and consumers, and for our economic health have never been higher.

Our agency is charged with an extremely significant task, to promote and protect the health of the American people. This includes ensuring the safety, effectiveness, and wholesomeness of products that Americans rely on, as you noted, in fundamental, sometimes lifesaving, ways—drugs, vaccines, medical devices, our Nation's food supply, and more. But it also includes working proactively to foster the scientific innovation that will lead to tomorrow's new breakthrough products. Both roles are essential to delivering progress for the American people and both roles impact our economy by encouraging consumer confidence, growing key industries, and creating jobs.

Thanks to the support of the chairman and members of this subcommittee, FDA has been able to make forward progress on a wide range of vital priorities to improve the health, quality of life, safety, and security of all Americans. With the resources that you have appropriated, we have achieved tangible benefits for the people that we all serve.

During the past year, we have approved dozens of new drugs, vaccines for seasonal and pandemic flu, and medical devices for hearing and vision loss, severe asthma, and to perform 3-D mammography screening. We applied cutting-edge whole genome sequencing to trace foodborne illness outbreaks. We have launched a new system that identified 100 food safety problems in the first months of operation. We have collaborated with the National Oceanic and Atmospheric Administration to develop and to perform screening tests to assure seafood safety and reopen the gulf coast fisheries after the Deepwater Horizon oil spill. Those are just a few of the things that the agency has accomplished in the past year.

As you can see, FDA is charged with an enormous and unique set of tasks, and if we do not do our job and do it fully, there is

no other agency or entity to backstop behind us. That is why I am here to ask for your support of the fiscal year 2012 budget for the FDA.

The proposed budget includes \$4.4 billion overall and identifies four priority initiative areas: Transforming Food Safety and Nutrition; Advancing Medical Countermeasures; Protecting Patients; and Fostering FDA Regulatory Science and Facilities.

Compared to the fiscal year 2010 budget, the fiscal year 2012 budget represents an increase of almost \$1.1 billion, \$382 million in budget authority, and \$694 million in user fees. The amount of user fees includes \$60 million for three new user fees that FDA is proposing.

In addition, in an effort to contribute to deficit reduction, we will undertake nearly \$30 million in contract and administrative savings across the agency.

These four initiatives are critical to our mission of protecting and promoting the health of the public and they also represent important opportunities for our food and medical product industries to grow and to strengthen our economy. In other words, they will provide the significant return on investment that we all are looking for, for products, for people, and most importantly, for the public health. And let me just quickly explain how.

First, the Transforming Food Safety and Nutrition Initiative contains an increase of \$326 million to build a stronger, more reliable food safety system that will protect American consumers. We will use these resources to aggressively implement the Food Safety Modernization Act (FSMA) that the Congress passed in December. This landmark legislation provides FDA with the tools to establish a prevention-focused food safety system, placing the primary responsibility for prevention on the food producers and processors and leveraging the valuable work of FDA's State and local partners. FDA will also make sure that American families have the information that they need to make more healthful food choices through menu and vending machine labeling.

Second, for the Advancing Medical Countermeasures Initiative, FDA proposes \$70 million. Medical countermeasures include drugs, vaccines, diagnostic tests, and other medical equipment that are needed to detect and respond to deliberate chemical, biological, radiological, and nuclear threats, as well as emerging infectious diseases or other natural disasters, all of which threaten the lives and safety of the American people and I think weigh heavily on our minds right now given the tragic events in Japan. This investment will help accelerate the development of countermeasures to meet a set of critical national security and public health needs.

Third, the Protecting Patients Initiative, for which we are proposing an increase of \$123.6 million, will allow FDA to establish a pathway for approving lifesaving biosimilar products. This could offer substantial savings for the Federal Government and private-sector healthcare. This initiative also includes investments in scientific tools and partnerships to enhance the safety of increasingly complex drugs, medical devices, and biologics, and an increasingly complex foreign and domestic global supply chain.

Fourth, the FDA Regulatory Science and Facilities Initiative contains an increase of \$48.7 million to strengthen the core regulatory

scientific capacity that supports all of FDA's missions and will enable us to truly streamline and modernize our regulatory work by applying the best possible science, especially as we address more advanced therapies, complex devices, and emerging technologies. It will also allow FDA to outfit and to occupy the Center for Biologics and Center for Drugs Life Sciences–Biodefense Laboratory complex which will play a critical role in shaping strategies in response to pandemics, emerging infectious diseases, and deliberate biological threats.

So, even in these difficult times, the FDA's fiscal year 2012 budget is essential to our ability to take meaningful, science-based action on behalf of the American people. With these investments and your support, I am confident that we can build on our past successes and better ensure our Nation's health.

Thank you for the opportunity to testify and I am happy to answer your questions.

[The statement follows:]

PREPARED STATEMENT OF DR. MARGARET A. HAMBURG

INTRODUCTION

Chairman Kohl, Ranking Member Blunt, and members of the subcommittee, I am Dr. Margaret Hamburg, Commissioner of the Food and Drug Administration (FDA). I am pleased to present the President's fiscal year 2012 budget request for FDA.

For today's hearing, I am joined by Patrick McGarey, FDA's Assistant Commissioner for Budget and Norris Cochran, Deputy Assistant Secretary for Budget at the Department of Health and Human Services (HHS).

In my testimony today, I will outline the important initiatives in FDA's fiscal year 2012 budget request to the Congress. My testimony also highlights FDA's unique role in protecting public health and the value that FDA delivers for American taxpayers.

UNIQUE ROLE OF FDA

FDA is charged with ensuring the safety, effectiveness, and wholesomeness of products that Americans rely on in fundamental, sometimes lifesaving, ways—drugs, vaccines, medical devices, our Nation's food supply, and more. These are products that people need; products they care about; and products that are critical to their health, safety, and well-being. Our role is unique and if we don't do our job completely and responsibly, there is simply no other agency or entity to backstop us.

Fulfilling our mission—to promote and protect the public health—is a difficult task under any circumstances. But these are especially challenging times. Today, the powerful forces of globalization are reshaping our world. We face complex threats—both accidental and deliberate—that pose new risks to FDA-regulated products and the Americans who rely on them. And we have been forced to rethink the way we do our job.

But we also live in a time of great advances in science and technology. Breakthroughs in the life sciences have provided industry with new opportunities to invest, innovate, create new markets, strengthen our economy, and most important, deliver new products and benefits for the American people.

FDA INNOVATION, ACCOUNTABILITY, AND RESULTS

My dedicated colleagues at the FDA are deeply committed to the health of American patients and consumers—and they recognize that innovation is essential to progress in public health.

Innovation is the foundation of the successful industries we regulate, and innovation is responsible for remarkable advances across all of the product areas within FDA's jurisdiction—which is why we must work proactively to foster the scientific innovation that will lead to tomorrow's breakthrough products.

Innovation is also critical to maintaining U.S. global leadership in many areas, including medical product development. Currently, most new drugs are approved in the United States before they are approved in Europe. And according to a recent

industry study, we either are ahead of or tied with Europe for approval of medical devices that fall into the lower-risk category, which represents 90 percent of medical devices.

In my testimony, I highlight some recent FDA actions that allow the food, drug, biologic, and device industries—all engines of innovation—to bring new products and technologies to market.

We also recognize that just as FDA supports the ability of industry to innovate, FDA itself must innovate and become more efficient. In FDA's fiscal year 2012 budget, we highlight more than 100 examples in which FDA centers and offices are improving the efficiency of our programs, and in many of these examples, we are also supporting industry efforts to develop new products. Examples of FDA innovation include the recent launch of the Innovation Pathway, a program to stimulate new, breakthrough technology and advances for medical device manufacturers, as well as a scientific collaboration with industry to develop novel technologies to detect new and traditional foodborne contaminants and to develop safe food packaging. These efforts reduce the risk and expense of recalling products that fail to meet safety standards.

FDA is also committed to accountability. During the past year, we developed and implemented FDA-TRACK, an agency-wide system to monitor key performance measures for more than 90 FDA programs. Through FDA-TRACK, we are systematically monitoring FDA's progress as we work to achieve our performance measures and allowing stakeholders and the public to witness our progress through quarterly reports that we post on www.FDA.gov.

But the best measure of the value that FDA delivers is the opportunity to reduce costs and achieve measurable savings in areas that are important to America's health. One example is FDA support for the generic drug industry, which markets drugs that save American patients and taxpayers \$140 billion per year.

A second example is FDA's food safety program, which is making significant progress to reduce foodborne illness that costs the U.S. healthcare system \$88 billion annually. A third example is the fiscal year 2012 Generic Biologics Initiative, which will generate significant savings for the Federal Government and for private-sector health plans.

FDA ACCOMPLISHMENTS

Thanks to the support of this subcommittee, FDA continues to achieve important public health milestones. Since early 2010, FDA has supported industry efforts to bring new products and technologies to market—and to think creatively about how to promote and protect the health of the American people in meaningful and sustainable ways.

During the past year, FDA:

- approved new drugs to treat diabetes, hypertension, osteoporosis, bacterial infections, chronic pain, rheumatoid arthritis, preterm birth, gout, immune deficiencies, schizophrenia, major depressive disorder, and pulmonary disease;
- approved five new therapies to treat rare diseases;
- conducted four workshops to stimulate new orphan drug development;
- tentatively approved the 126th anti-retroviral drug under the President's Emergency Plan for AIDS Relief;
- approved vaccines for seasonal and pandemic influenza;
- approved new donor screening tests for HIV and Chagas disease;
- cleared a new test to support kidney transplant patients;
- approved new medical devices to treat hearing loss, severe asthma, and vision loss, and to perform 3-D mammography screening;
- cleared technology for physicians to view diagnostic images on iPhones and iPads;
- identified measures to prevent radiation overdoses during computed tomography scanning;
- permitted the marketing of the first test to identify norovirus, a common foodborne illness;
- applied genome sequencing to trace foodborne illness outbreaks;
- collaborated with the National Oceanic and Atmospheric Administration to develop tests to re-open gulf coast fisheries;
- formed public-private partnerships to improve produce safety; and
- launched a new system that identified 100 food safety problems in first 7 months of operation.

FISCAL YEAR 2012 BUDGET SUMMARY

Although the President emphasized in his fiscal year 2012 budget message that the fiscal realities we face require “hard choices,” the 5-year freeze on Federal spending announced in the fiscal year 2012 budget is not an across-the-board cut. Although the overall budget represents a freeze in the aggregate, it also contains investments in areas critical to sustain and grow the American economy.

FDA is one such area of critical investment. As you can see from FDA’s fiscal year 2012 priorities—food safety and nutrition, medical countermeasures (MCMs), patient safety, and FDA regulatory science—an investment in FDA is an investment in the economic health of two of the largest segments of America’s economy: our food and medical products industries.

Our fiscal year 2012 budget is also an investment in health—in the health of individuals and the public health of our Nation. As a result, the budget includes \$4.4 billion in budget authority and user fees to protect and promote the health of the American public every day, and through every stage of life.

CONTRACT AND ADMINISTRATIVE SAVINGS

Although FDA’s fiscal year 2012 budget is an overall increase for FDA, it also contains savings that contribute to the administration’s deficit reduction goals. FDA is proposing \$29.7 million in contract and administrative savings designed to achieve reductions and cut costs across all FDA program areas.

To achieve these savings, FDA will reduce administrative staff by 46 full-time equivalents, lower contract costs by increasing competition, and expand the use of blanket purchase agreements and other agency-wide approaches to reduce contract costs. Where possible, we will also save by using technology to improve how we manage our contracts and the contracting process. Finally, in some program areas, FDA will reduce the cost of employee training by replacing the traditional classroom model with online training.

TRANSFORMING FOOD SAFETY AND NUTRITION

For fiscal year 2012, FDA proposes an increase of \$326 million for the Transforming Food Safety and Nutrition Initiative to build a stronger, more reliable food safety system that will protect American consumers. This increase includes \$225.8 million in budget authority and \$100.2 million for user fees, including the four new user fees enacted in the FDA Food Safety Modernization Act (FSMA).

With this increase, FDA will begin to implement the landmark food safety legislation, which the Congress enacted last December. Under this initiative, FDA will also ensure—through menu and vending machine labeling—that American families have the information they need to make more healthful food choices.

FDA Food Safety Investment.—The passage of FDA FSMA, the first major overhaul of our food safety law in more than 70 years, will transform FDA’s food safety program. Through FFSMA, the Congress enacted new safeguards and enhanced tools to protect America’s food supply by preventing food safety problems rather than reacting to problems after they occur.

Regrettably, foodborne illness is pervasive across America. Each year, nearly one of every six Americans gets sick due to foodborne illness. Some cases are severe—128,000 require hospitalization, and 3,000 Americans die from foodborne illness.

FFSMA closes significant and longstanding gaps in FDA’s food safety authority. For example, FFSMA gives FDA important new tools to ensure that imported foods are as safe as domestic foods and directs FDA to build an integrated national food safety system in partnership with State, local, and tribal authorities.

FDA will use these resources to establish a prevention-focused food safety system that leverages the valuable work of FDA’s State and local food safety partners. In addition to yielding profound public health benefits, the FFSMA focus on prevention offers the opportunity for a dramatic return on the resources that this subcommittee invests in food safety. According to recent studies and the latest estimates of foodborne illness, the healthcare cost of foodborne illness—not including costs to the food industry—exceeds \$88 billion each year.

The combined result of these actions will be a stronger, more reliable food safety system that protects the American people.

In its fiscal year 2012 budget, FDA is organizing its food and animal feed safety programs and investments to implement FFSMA. Our detailed budget documents display the specific dollar amounts that FDA will allocate to implement the 22 separate sections of the law.

Nutrition.—As part of the Transforming Food Safety and Nutrition Initiative, FDA will also begin an \$8.8 million program to improve nutrition labeling on res-

restaurant menus and vending machines so that consumers can adopt healthier diets. This small but significant initiative offers powerful return on investment. A fiscal year 2009 analysis estimated the medical costs of obesity at \$147 billion per year (Finkelstein, et al., Health Affairs), which means that controlling obesity goes hand-in-hand with controlling healthcare costs and reducing a significant burden on our economy.

The investments in this initiative will empower consumers to make better nutritional choices and will motivate food producers to develop healthier foods.

ADVANCING MEDICAL COUNTERMEASURES

For fiscal year 2012, FDA proposes \$70 million for the Advancing MCMs Initiative. MCMs include drugs, vaccines, diagnostic tests, and medical equipment and supplies to respond to deliberate chemical, biological, radiological, and nuclear (CBRN) threats and emerging infectious diseases, such as pandemic influenza.

The Advancing MCM Initiative will strengthen FDA's ability to respond to these national security threats by supporting the development of MCMs as well as enhancing review by allowing FDA to work interactively with product developers and Government partners from early in the development process. With this investment, FDA will be better able to anticipate and resolve bottlenecks in MCM development and accelerate development of MCM products for pressing public health and national security needs.

MCM Gap.—Today, our Nation lacks the range of MCMs required for emergency response. For example, there are no countermeasures to treat acute radiation syndrome, which would afflict millions in the aftermath of a nuclear event.

Moreover, no FDA-cleared, rapid, point-of-care diagnostics exist for any of the bioterror agents of greatest concern. Such diagnostic tests are essential to guiding the public health response; ensuring that patients receive the most appropriate treatment; and promoting appropriate use of the limited supplies of MCMs available during a public health emergency.

Analysis of the Need for MCMs.—In December 2009, on the heels of the influenza pandemic, HHS Secretary Sebelius called for a comprehensive review of the Nation's readiness to defend against CBRN threats. The HHS review was prompted by recognition that influenza vaccine became available only after pandemic influenza was already widespread across the United States. The HHS review called on the expertise of the scientific leadership of all Federal agencies that work with MCMs, as well as State and local health departments, the National Biodefense Science Board, and the Institute of Medicine.

The review, released on August 19, 2010, identified the barriers to MCM development as well as significant opportunities to improve the path for successful MCM development. The review identified FDA as critical to the success of the MCM Enterprise, primarily because FDA evaluation of product safety and efficacy can significantly affect the course of product development.

The report further recognized that robust FDA engagement from the earliest stages of product development can substantially increase the odds of successful approval. In other words, increased support for FDA's MCM activities is one of the most critical steps the Federal Government could take to transform the larger MCM Enterprise.

Threat Assessment.—Dozens of reports since September 2001 and the October 2001 anthrax attack have affirmed the risk of terrorist groups wielding biological weapons and the suffering, death, and social and economic disruption that would result in the case of an attack. Therefore, the fiscal year 2012 investment in FDA medical countermeasure development and review offers the potential for a strong return on investment.

The analysis of the National Security Strategy warns that the effective dissemination of a lethal biological agent within a U.S. population center would endanger the lives of hundreds of thousands of people and have unprecedented economic, social, and political consequences. The National Security Council warned in 2009 that the economic cost of a well-executed bioterrorist attack on American soil could exceed \$1 trillion.

Clearly, such an attack would have profound consequences on our social and political order, and more broadly, our way of life. Without this investment, America's public health and national security will continue to be at risk.

PROTECTING PATIENTS

For fiscal year 2012, FDA proposes an increase of \$123.6 million for the Protecting Patients Initiative. This increase includes \$64.8 million in budget authority and \$58.8 million from three new user fees. FDA is proposing new fees for reviewing

generic drug applications, paying the cost of medical product reinspections, and inspecting imports that arrive by international courier.

Generic Biologics.—With the fiscal year 2012 increase in budget authority, FDA will establish a pathway for approving generic biologics. Generic biologics are biological drugs shown to be highly similar to an FDA-approved biological product. In some cases, generic biologics may also be interchangeable with the FDA-approved biological product.

Biological products include therapies to treat certain cancers, rheumatoid arthritis, age-related macular degeneration, and HIV. These therapies cost \$15,000 to \$150,000 or more per patient per year—and represent a significant share of Federal Government and private-sector pharmaceutical costs.

Approving biosimilar versions of these products offers the potential for substantial savings for the Federal Government and private-sector health plans. However, these savings will not materialize unless FDA has the resources to implement a clear regulatory pathway for approving generic biologics. FDA is requesting these funds for fiscal year 2012 because the sooner we make this investment the sooner we will see savings from generic biologics.

Other Medical Products.—In addition to investing in generic biologics, the Protecting Patients Initiative also invests in new scientific tools and partnerships to enhance the safety of increasingly complex drugs, medical devices, vaccines, and other biological products. For example, the Protecting Patients Initiative will strengthen FDA efforts to modernize and improve safety throughout the supply chain of medical products at a time when the number of medical products manufactured abroad is increasing dramatically, which presents real challenges for medical product and manufacturing safety.

Safer medical products not only benefit patients, but also benefit the manufacturers of drugs, biologics, and medical devices. Safer products reduce healthcare costs and allow manufacturers to avoid the expense of product recalls.

With the resources in this initiative, FDA will modernize its approach to ensure safety across the supply chain for medical products. The initiative will also expand FDA's capacity to conduct medical product safety assessments and strengthen the safety of vaccines and the blood supply.

The proposals in this initiative offer a high rate of return for the investment of Federal dollars. They can reduce the cost of care and promote safe, high-quality, and accessible healthcare that Americans deserve. In addition, the administration is proposing additional measures for fiscal year 2012 designed to reduce costs and increase the availability of generic drugs and biologics.

FDA REGULATORY SCIENCE AND FACILITIES

For fiscal year 2012, FDA proposes an increase of \$48.7 million for the FDA Regulatory Science and Facilities Initiative.

The FDA Regulatory Science and Facilities Initiative will strengthen the core regulatory scientific capacity that supports all elements of the FDA mission. Regulatory science focuses on developing the knowledge and tools to properly assess the safety, effectiveness and quality of products that are being developed or are already on the market. Specifically, this initiative will help modernize and streamline the regulatory pathways that industry relies on to bring new, innovative products to market.

It will also modernize the FDA review and approval process for products that rely on new and emerging technologies. The result will be promising new opportunities to diagnose, treat, cure, and prevent disease.

Finally, the resources in this initiative will also allow FDA to outfit the Center for Biologics Evaluation and Research—Center for Drug Evaluation and Research Life Sciences-Biodefense Laboratory complex. On August 18, 2010, the General Services Administration awarded the construction contract for the new laboratory complex at White Oak, and construction work is currently underway. Without this investment, FDA must pay double the rent: the first for a new lab we cannot occupy and second for the old lab we cannot vacate.

The new laboratory complex will help FDA fulfill our scientific responsibilities to promote drug and biologic safety and MCM development and prevent threats, including annual influenza. FDA must make this investment in fiscal year 2012 to ensure that the laboratory is operational and ready for occupancy in fiscal year 2014.

FDA CURRENT LAW USER FEES

For fiscal year 2012, FDA proposes an increase of \$634.5 million for 12 current law user fee programs.

FDA user fee programs support safety and effectiveness reviews of human and animal drugs, biological products, medical devices, and other FDA-regulated prod-

ucts. Fees also allow FDA programs to achieve timely and enhanced premarket review performance. Finally, fees support the programs and operations of the FDA Center for Tobacco Products.

Existing user fee laws authorize fee increases for many FDA user fee programs. The increases expand the available options for treating and curing diseases and addressing other important public health needs.

CONCLUSION

The FDA budget for fiscal year 2012 contains important investments for critical public health priorities. With these resources, FDA will transform food safety; support the development of urgently needed MCMs; protect patients by assuring that the drugs and other medical products they rely on are safe; and advance regulatory science, which serves as the foundation for all science-based decisions at FDA.

Thank you for the opportunity to testify. I am happy to answer your questions.

Senator KOHL. Thank you very much, Dr. Hamburg. We will now embark on a round of questions from the panel.

FOOD AND DRUG SUPPLY

Your statement highlights what FDA can do with additional funding, but what happens if you do not get the full amount you are asking for like, for example, can you still tell us that you will be able to ensure a safe food and drug supply with your present budget?

Dr. HAMBURG. Well, as you know, FSMA, which just went into law, gives us a historic opportunity to really transform the food safety system in our country into one based on prevention and one that will really make a difference in preventing costs in terms of illness and death of people, consumers, and preventable costs to our healthcare system and to the food industry.

If we cannot get additional resources to support the implementation of this bill, we will, of course, continue to pursue important aspects of what is contained in that legislation, but we will only really be able to put forward regs. We will be able to put ideas and programs on paper, but we will not be able to fully implement all that needs to be done. We will not be able to pursue the ambitious inspection program domestically and internationally that enables us to have a hands-on look at how food production and processing is being done to ensure safety.

Importantly, we will not be able to work with manufacturers and producers to really put in place the prevention-based strategies, the risk-based approaches that are really so vital to what we need to be doing so that we are not scrambling after outbreaks occur but actually preventing them in the first place. That will save lives. That will save money.

And we will not be able to address the increasing challenge of import safety. More and more of the food we eat in this country is actually grown, produced, manufactured, distributed overseas in an increasingly complex supply chain, and we really have a responsibility to enhance our efforts to ensure the safety of that global food supply as well.

And at the end of the day, it is very, very important to industry that we have and maintain the reputation of a strong food supply. We do, at the present time, have one of the strongest food safety systems in the world. That is very, very important. It matters to people and it matters to the health of the industry, their ability to have markets that people have confidence here at home, and export

markets depend on the confidence of the public at large in the work of the FDA working with industry.

MEDICAL COUNTERMEASURES

Senator KOHL. The budget for fiscal year 2012, Commissioner Hamburg, proposes an increase of \$70 million to help develop new therapies that could be quickly used in the event of a chemical or biological attack or a natural disaster of another sort. The tragedy in Japan where they are confronting so many challenges right now including, of course, radiation exposure, does focus our attention on the importance of preparedness.

Can you tell us a little bit about this initiative of yours? What will we be getting with this investment? What can we tell the American people about our present state of preparedness with respect to something comparable to what happened in Japan?

Dr. HAMBURG. This is a very important initiative, and as you say, it is underscored by recent events. As a Nation, we must be prepared and we must be resilient in the face of a range of potential threats, both naturally occurring and deliberately caused. And at the present time, we have more work to do, and this Medical Countermeasures Initiative at FDA is part of a broader administration-wide initiative to ensure that we as a Nation are prepared for the kinds of potential threats to our Nation's security that can occur.

If we cannot move forward with this Medical Countermeasures Initiative, we will not be able to ensure that we have the drugs, the vaccines, the diagnostics, the medical equipment that is necessary to respond to an event. We need to be developing, for example, with respect to radiation safety, state-of-the-art therapies that will enable us to treat both acute radiation syndrome, such as, sadly, workers in the nuclear plant in Japan are potentially being exposed to, and other forms of radiologic exposures, both the threat of a dirty bomb or an intentional nuclear event, or a catastrophic, unexpected event, such as what has occurred in Japan.

RADIATION PREPAREDNESS

Senator KOHL. Are we prepared at this time to deal with the fallout of a nuclear meltdown such as they have had in Japan? Are we prepared?

Dr. HAMBURG. There are many aspects of preparedness, and actually FDA is involved in a number of them. There is the issue of ensuring that any imported products from Japan are screened and safe for consumption, and we are actively involved in addressing that. At the moment, there are not imports from that region coming in.

Senator KOHL. I was referring to something akin to what happened in Japan. Are we prepared today to deal with it here in the United States?

Dr. HAMBURG. Oh, an event in—you know, we have many systems of preparedness in place, but we are lacking some critical elements of preparedness, including these important medical countermeasures. We need to make sure that we have the medical treatments necessary. We do not have treatments for acute radiation sickness. We need to develop those treatments and we need to

make sure that they are available for the American people and potentially available for people around the world.

Senator KOHL. Before I turn this over to Senator Blunt, I believe I hear you saying that we could not assure the American people here today that in the event of something similar to what happened in Japan, we would be in a position to take care of the needs of the people in the areas where the nuclear disaster occurred. We are not prepared to take care of them.

Dr. HAMBURG. We have systems for response and we have some acute measures that we could provide, but we do not have, for example, as I said, the treatment of acute radiation sickness that we would need to be able to benefit people exposed to very high levels of radiation exposure. We do not have the treatments to address a range of potential nuclear exposures. We would be able, in the case of a nuclear reactor event, to provide potassium iodide for limited protection of the thyroid organ. There are other potential exposures, and we are working to develop, as a Government, interventions that will make a difference.

But we need to make targeted investments today to be prepared for tomorrow. That is what this Medical Countermeasures Initiative is about. In the field of radiation exposure absolutely, yes, we have other gaps in preparedness that we need to address whether it is naturally occurring infectious disease threats or the potential for biological, chemical, nuclear terrorism. We really have a responsibility to make sure that we make these investments today, and I think it is something that we all, for our Nation's security, need to work on together.

Senator KOHL. Senator Blunt.

RADIATION TREATMENTS

Senator BLUNT. Thank you, Chairman.

Commissioner, are you saying on this area of radiation problems, that we do not have a stockpile of the treatments or that the treatments do not exist?

Dr. HAMBURG. The treatments do not exist for many aspects of radiation exposure.

Senator BLUNT. And are you saying that under this program you are talking about, one of the FDA's goals would be to develop those treatments?

Dr. HAMBURG. Would be to work with industry and Government scientists to, yes, develop and also to get them reviewed and approved for safety and effectiveness so that they could be available to the American people.

RESPONSIBILITY DUPLICATION

Senator BLUNT. Well, I am going to get to review and approval here in 1 minute. Let me go through things with some quickness, if I can.

On the duplication issues that I talked about earlier and that we talked about the other day, is there any ongoing effort in the food and drug safety agencies to try to figure out how we can do that in a more focused way?

Dr. HAMBURG. It is an important area of focus. Soon after the President was inaugurated, he initiated the Food Safety Working

Group to bring together the different agencies of the Federal Government that have responsibilities for food to really look at how they could coordinate better and to develop key cross-cutting strategic priorities as well.

It is the case that FDA and USDA have the major responsibilities for food safety in this country, and we, of course, do work closely together and we are examining ways to work more closely going forward. Certainly, in FSMA implementation, we are working closely with USDA in order to take advantage of their expertise and experience working in farming communities, to take advantage of the resources that they already have on the ground. We are also talking with them about how to more effectively share information around inspections and other food safety-related activities.

The partnership is also very important, and the integration working with State and local authorities as well, and that is an important component of FSMA, and it is a very important component of how we do business and need to do business more efficiently going forward.

Within the FDA itself, we have looked hard at how to make our work more efficient and integrated as well because we had components of the FDA working on food safety issues and we have now created an Office of Foods with a Deputy for Foods in charge of all of those activities and are integrating our food safety activities across both the human and the animal food safety arenas to make our program more robust, more integrated, and more efficient. And there is lots more work to be done.

FOOD SAFETY MODERNIZATION ACT

Senator BLUNT. Well, I encourage you to pursue all of that work as vigorously as we can. We need to be able to defend the things we do and to argue with justification that we are trying to do those things better and not duplicate our effort.

On the duplication of effort, one of my big concerns about FSMA was yet another on-farm presence of another Government regulator. What are you doing there, as you look at those new responsibilities, and are you working with agencies like USDA that are already there to see how you can work with the information and structure they have?

Dr. HAMBURG. Yes. No, very much so. We have been working hard to really make sure that we understand the challenges and the concerns of the farming community as we move towards implementing FSMA. We, of course, have been on farms in the past when there are food-borne outbreaks around BSE issues and tissue residue issues. So, it is not completely new territory to us. But we recognize that we are now undertaking a new set of roles and it is very important that we work constructively with the farming community and with other partners that interact with the farming community.

I have been out to visit quite a number of farms and my Deputy for Foods even more, have learned a lot about the full range of different types of farms and their different issues and have listened hard and will continue to try to work with the farming community. And USDA has been very helpful to us and the Extension Service

is a critical component of our ability to do outreach to farmers and to consumers.

We recognize that nobody wants more people in their farming communities telling them what to do. We view this as a collaboration. We view this as an opportunity for us to pursue a common goal of ensuring that the food supply is safe, doing what I think every farmer and food producer wants to be able to do, which is to make sure that the food they produce is safe and wholesome and that consumers can count on it and trust it.

FOOD TRACEABILITY

Senator BLUNT. And do you have new responsibilities for food traceability in this law?

Dr. HAMBURG. It is an important component of what we need to do as part of FSMA, and it will certainly prove to be of value if we can put that kind of a program in place because it will enable much more rapid identification of a problem and its source when it should occur so that we can identify and respond rapidly, control the problem, and mitigate the effects, and get those companies back up and running, producing the food with a robust market for the food that they produce.

Senator BLUNT. Would that be across the board? This is a question I do not know the answer to. Is that across the board for your agency? Does that include livestock as well?

Dr. HAMBURG. No. We regulate about 80 percent of the food supply, but we are not responsible for meat, poultry, processed eggs, and catfish.

Senator BLUNT. And particularly catfish.

Dr. HAMBURG. Right.

Senator BLUNT. Mr. Cochran will be glad to know that you are not going to get involved in catfish. Probably Mr. Pryor as well.

But you will have new traceability requirements or obligations on the things you do regulate on the farm.

Dr. HAMBURG. We are going to be starting to have those discussions about what such a system should look like. Industry has an important voice and a lot of experience in these issues because it is so important in terms of being able to rapidly identify problems and address them.

REVIEW PROCESS

Senator BLUNT. Let me ask just a couple of quick questions on review processes, particularly since you mentioned you might have some other ways to try to get these products that Chairman Kohl was talking about to the market quicker.

USER FEE REVIEWS

Two of your largest fee programs, prescription drugs and medical device review, are up for reauthorization in this fiscal year. How do you intend to approach those fee negotiations with industry?

Dr. HAMBURG. Well, these are very important activities, and the user fee programs that were introduced in the 1990s have demonstrated their value on the drug side and on the device side in terms of helping to give us the resources that we need to be able

to ensure the best possible review in the most timely way possible. The negotiations are underway. We have actually just begun negotiations with the generic industry as well, which currently does not have user fees. We are optimistic that we are going to be able to achieve a good proposal for the next user fee legislation that will come before you. And I think both the industries we regulate that provide user fees and certainly our agency feel that these are critical programs that help to enable us to be able to do our job. And I think that overall we have been performing well in response to the introduction of the user fees and meeting the targeted goals both on the drug side and the device side.

Senator BLUNT. I do not know what the fiscal year 2010 numbers were. I think the fiscal year 2009 numbers—and clearly, this is the first 9 months of this administration, so numbers that may be even less than fiscal year 2009. But I think in fiscal year 2009, the agency failed to meet one-third of its drug review goals and approximately 20 percent of its device review goals.

Dr. HAMBURG. Well, those are different numbers than I have seen. On the drug side, it is the case that in recent years we have not met all of the goals, although in the first 15 years of the program, we met and surpassed the goals. In 2007, the FDA Amendments Act (FDAAA), gave FDA quite a comprehensive set of additional new responsibilities mainly focused on drug safety, and it is the case because our resources are fairly limited, we had to target resources that might have gone into drug review into responding and implementing the requirements of this new and important Amendments Act. So, we saw some drop-off in our review times as we began to implement those components of FDAAA. We are getting right back up to the performance levels prior to that though. But we have had a lag. That is true.

On the device side, most of the device program is focused on the premarket notification program, what is called the 510(k) process. About 95 percent, I think, of the devices that we review are part of that program. And we have been meeting the targets agreed to with industry in that program.

Senator BLUNT. And they should expect you to do that.

Dr. HAMBURG. And they should expect us to do that.

In the premarket approval area, which is a more rigorous approval mechanism and has more requirements, we can and will do better. We have put forward, under the leadership of our new center director, Dr. Jeffrey Shuren—he has led a very serious review of our regulatory pathways, how we can make them more effective and efficient, how we can bring the best possible science to bear. He put forward in January of this year 25 recommendations that reflected a lot of public comment, discussions with industry, stakeholders, patient advocates, and others. He put forward these 25 recommendations for how we can do better.

We have also asked the Institute of Medicine of the National Academies of Sciences to take a look at some of the regulatory issues in the device area to make broader recommendations about how we can modernize and improve our regulatory pathways.

Senator BLUNT. Good.

Dr. HAMBURG. So, we want to keep working on it.

Senator BLUNT. if my figures are wrong here, would you please get back to me and let me know? But my notes here indicate that FDA failed to meet one-third of the drug review goals and approximately one-fifth of the device review goals. And if that is not right, just tell me at some future time.

Dr. HAMBURG. We will get back to you.
[The information follows:]

DRUG AND DEVICE REVIEW GOALS

In fiscal year 2008, we met or exceeded the 90-percent performance levels for 33 percent—or 4 of 12 goals—of the drug review performance goals. In fiscal year 2009, we demonstrated significant improvement in regaining stability in meeting our performance goals and met or exceeded the 90-percent performance levels for almost 60 percent—or 7 of 12 goals—of the drug review performance goals.

The Food and Drug Administration (FDA) agreed to more stringent device performance goals as part of the Medical Device User Fee Amendments of 2007, also known as MDUFA II. For fiscal year 2009, FDA is on track to meet or exceed 7 out of 10 device performance goals for which we have reportable results, including the goals relating to 510(k) devices, which represent more than 90 percent of the devices FDA clears or approves for marketing. The goals not met by FDA in fiscal year 2009 represent less than 3 percent of the submission volume FDA reviews, and performance has been steadily improving for these goals. The Center for Devices and Radiological Health has undertaken a number of steps to continue making improvements towards meeting these goals, including drafting clinical trial guidance, identifying, and recruiting needed staff expertise, strengthening its external experts program, and improving its premarket information management systems.

Senator BLUNT. I would also be pleased to see the numbers for fiscal year 2010, if they are available now, the data that ended September 30.

[The information follows:]

FISCAL YEAR 2010 DRUG AND DEVICE REVIEWS

It is too early to determine the overall performance for fiscal year 2010, given the current number of pending applications. While drug review performance numbers for fiscal year 2010 are still preliminary, it appears that the Food and Drug Administration (FDA) is on track to meet or exceed 11 of the 12 drug review performance goals called for under the Prescription Drug User Fee Act. Preliminary data as of the fiscal year 2010 Medical Device User Fee Amendments of 2007 (MDUFA II) performance report indicates that FDA is meeting or exceeding 5 of the goals for which there are sufficient results to reliably estimate current performance, and has the potential to meet or exceed all 12 performance goals.

I have got a couple other questions, but I think I will try to do those a little later, chairman, and let others ask questions. Thank you.

Senator KOHL. Thank you.
Senator Brown for 5 minutes.

MAKENA

Senator BROWN. Thank you, Mr. Chairman. I will take less time. My Governor from Ohio is coming in and I have a meeting with him in a few minutes.

But just one brief line of questioning, Dr. Hamburg. And thank you for joining us.

As you know, after the FDA-approved Makena, which was the version of a longstanding medicine that had been produced by compounding pharmacies for years given to women who were at high-risk of low birth weight, early birth babies, K-V Pharmaceutical announced that the price for the product would jump from

about \$10 to \$20 per injection and typically a woman would take 20 doses of it, I guess, over 20 weeks. It would jump from \$10 to \$20 per injection to \$1,500 per injection, which by my calculations is from \$10 to \$1,500 is a 14,900-percent increase.

Since the drug plays such a critical role in reducing the incidence of premature birth and the associated deaths and disabilities and costs, this price increase marks a dramatic setback for public health, to insurance carriers, to businesses, to taxpayers, to anyone and to the individuals trying to pay them going from \$10 times 20 injections to \$1,500 times 20 injections.

What can the FDA do to stop manufacturers from exploiting this existing approval process? Even though K-V has admitted that the price increase does not derive from R&D or from production costs, all they did was—my understanding—they say, pay \$200 million for the clinical trials, but they did not do the R&D. In fact, taxpayers did most of the R&D here. So, taxpayers, in the end, get a good drug, but it looks a lot like blackmail to me. Seat belts serve an important purpose too, but they are not priced in the stratosphere to reflect the fact they save lives. But they are pricing it in a way that they will make huge profits and it will compromise the public health.

What can you do? Administrative, legislative strategies? What do we do about a drug that has been used for decades and prevented an awful lot of low birth weight baby births and instead will become so, so, so prohibitively expensive?

Dr. HAMBURG. Well, it is such an important concern, and like you, I was very surprised when I learned about the price increase. I think it is important and an advance that we have an FDA-approved drug to prevent preterm pregnancy and all of its consequent serious medical concerns for both mother and infant. And while the drug had been available through compounding, compounding as a practice has been associated with serious health risks, contamination—

Senator BROWN. I am not in any way questioning that FDA did the right thing here. But my understanding is under Bayh-Dole enacted decades—three decades—25, however many years ago, I think in the 1980s. Under Bayh-Dole, you in fact do have the power to do something about this price and do something about K-V Pharmaceutical's actions. And if you do not, it is so important that we figure out something to do here.

This price increase in my understanding started this week, and it is only going to get worse. And if K-V is not willing to back down, I would hope the embarrassment of doing this to America's families would cause them to want to back down, at least try to price it a little more reasonably. But if you cannot use Bayh-Dole, you need to figure out a strategy what to do here.

Dr. HAMBURG. I am not as expert on these issues as I perhaps should be. I am told that Bayh-Dole does not fall under FDA's jurisdiction.

Senator BROWN. It is HHS with Bayh-Dole. You are suggesting that to them. You are writing a letter. You are weighing in with them, as we are doing and some other Senators are starting to now, as we worked on this.

Dr. HAMBURG. This is an issue that, as you know, has arisen recently. It did come as a surprise to us, very surprising, especially in that the National Institutes of Health, as you indicated, did the original clinical trials on which this approval was based. I think it is a very important issue to raise. FDA does not make its approval decisions with pricing considerations.

Senator BROWN. Nor should you.

Dr. HAMBURG. So, I think our role is a different one, but I think that the issue that you are raising about the accessibility to this important drug is a critical one.

Senator BROWN. I made clear I am not blaming FDA. FDA did the right thing. This company acted I guess you cannot say criminally, but immorally and any other string of adverbs you might want to choose. I am just looking for FDA to take leadership with HHS in finding a way, a strategy, or a path quickly to get this company to price its drug more reasonably for American women. Fair enough. Thank you.

Dr. HAMBURG. Thank you.

Senator KOHL. Thank you very much, Senator Brown.

Senator Moran.

FOOD FROM THE FARM

Senator MORAN. Chairman Kohl, thank you very much.

Thank you, Dr. Hamburg, for joining us.

In a broad sense, I was pleased to hear you indicate that you are working to understand the challenges of the farm community. In a broad sense, a broad question that I would ask you is what does that mean within FDA. Have you hired people as a result of the passage of the legislation who have farm experience—agronomists, actual farmers, or ranchers who produce food for our country?

LIVESTOCK ANTIBIOTICS

And then in a very narrower, more specific way, I want to raise concerns that I have raised previously in regard to your draft guidance No. 209 issued June 28, 2010, "The Judicious Use of Medically Important Antimicrobial Drug in Food-Processing Animals." We are very much a livestock-producing State, and I generally would tend to avoid commenting on what I would hope would be scientific-based decisions by FDA, but I continue to raise significant concerns about FDA's proposal in that draft guidance document.

It appears, from reading that draft, that FDA did not engage in rigorous review of current research in regard to antimicrobial resistance and is attempting to ban the use of those antibiotics for growth promotion, feed efficiency, and in some instances preventive treatment based upon uncertain evidence. In fact, if you read the report, the analysis uses the phrases like—when you cite reports in that draft, they fail to establish a direct link between antibiotic use and the risk to human health, not adequate epidemiological evidence, a very limited amount of that research unable to find a substantial body of evidence. And so there is, in my view, great uncertainty about the specific risk posed by antibiotics shown in your draft. And it also appears that the most recent scientific evidence was completed 10 years ago.

And so I am asking what has changed, other than personnel at the FDA, that now causes the FDA to have a significant interest in regulating antibiotics.

Also in that draft you state, in fact, that before withdrawing a drug that is for—a labeled use of an approved drug, Federal law requires the FDA to demonstrate that new evidence shows that a drug is not shown to be safe under approved conditions. And I am interested in knowing what that new evidence is and how you are proceeding with this draft, what time frame, have you read the comments, and the direction that you are going.

Dr. HAMBURG. As you well know, antibiotics are an essential and vital tool for the health of animals and the health of people. It is a limited resource. There is a serious and growing problem with antibiotic resistance, and that is well documented in human populations and in animal populations. And that is the concern that we are trying to address. We do not want to go back to an era of pre-antibiotics because the antibiotics that we have no longer work. And in some areas of serious medical disease, we have begun to see that kind of a circumstance occurring.

We are a science-based agency. It is our mission, our orienting purpose to make data-driven science-based decisions. So, it is very, very important to us that we do that rigorous review of the scientific literature and really look at what the data tells us about these important questions. There is broad scientific literature in this area. There is a lot of data to support the concerns about the use of antibiotics in food-producing animals for growth promoting or feed enhancement purposes. Many, many of the public health, medical, and scientific societies have reviewed the science and have made recommendations that such use should not be considered judicious, therapeutic use. We, of course, are doing our own internal reviews.

But this guidance is voluntary guidance. We are working on it with industry and other stakeholders. When we proposed our framework, which was to limit medically important antimicrobial agents in food-producing animals to the circumstances that are necessary for assuring health and to also have those antibiotics used under the supervision or oversight of a veterinarian, that was done as guidance. It was put forward over the summer. We have received a lot of comments from a range of stakeholders, all with very different and very hard-held perspectives. We are analyzing those comments and continuing to look at the data. We will be coming forward with a revised guidance and we will continue to have that open for comment from the public. We want to move towards something that benefits the health of animals and humans.

Senator MORAN. Mr. Chairman, I have follow-up, but I notice they have just called the vote and I would not want to prevent Mr. Pryor from having his opportunity to question.

But I would say that the draft proposal that you have put forth does not demonstrate the things that you said about the broad scientific evidence. It lacks the connection. And I also still continue to believe that the scientific research that you announced or indicated in your draft proposal is still 10 years old. And so if there is more to come or you have additional scientific-based evidence, I would welcome that.

Thank you, Mr. Chairman.
 Senator KOHL. Thank you, Senator Moran.
 Senator Pryor.

NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

Senator PRYOR. Thank you.

Thank you for joining us today, Commissioner. It is always good to see you.

Let me start with something that you know is near and dear to my heart. It happens to be located in my State. It is the National Center for Toxicological Research (NCTR). NCTR focuses on technological research so that the FDA can make science-based decisions, and this includes an emphasis on regulatory science. The decisions that the FDA makes based on this research range from food safety to safety devices used in the medical community to safety of basic cosmetics.

The House has proposed a very significant cut—I believe it is 43 percent—in their continuing resolution, and my understanding is that might even lead to the closure of NCTR. I guess the first question is, do you have any idea why the House targeted NCTR?

Dr. HAMBURG. No, I really do not, but it is a grave concern to me what that will mean.

Senator PRYOR. If you do not mind, tell the subcommittee what NCTR is and what it does and what its unique role is at the FDA.

Dr. HAMBURG. Well, it is a unique resource for FDA and for the Nation. It is a center for toxicological research really focused on strengthening our understanding of a set of safety concerns that cut across drugs and cosmetics and food, dietary supplements, a range of issues that FDA regulates. It is helping us to really understand emerging new technologies in terms of the scientific promise that they hold, things like nanotechnology. They have been a leader in nanotechnology research which offers applications in so many areas. But also, we need to understand what are the implications in terms of near-term and long-term safety issues, and they are a leader in research in that area.

They undertake important research in areas that are very much on the minds of Americans these days, issues like bisphenol-A (BPA), a chemical in plastic and the lining of food containers, really trying to sort out what are the risks and benefits of a substance like that and really understand and trying to modernize the underlying science of toxicology so that we can get important answers for consumers and to support industry in key areas and to make sure that we have the innovative products that Americans are counting on.

Senator PRYOR. Is there another facility that does all this type of research?

Dr. HAMBURG. It is really quite a unique resource, a whole center really focused on toxicology research and doing this research in the service of product evaluation for safety and efficacy.

NANOTECHNOLOGY

Senator PRYOR. You mentioned a few moments ago about nanotechnology and research in that area at NCTR. There are more and

more products that are coming onto the market that claim to be nanotechnology products. I am sure a lot of them are.

What steps is FDA taking to ensure the American public that nano products are safe?

Dr. HAMBURG. Well, there is a broad research agenda that needs to be undertaken to really understand the effects that these very, very small nano-sized materials have when they are introduced into the human body, often with chronic exposures, and they can be used to deliver drugs in exciting ways to get targeted therapies to people. They can be used in food products, in cosmetics. They are used in non-FDA-regulated products as well, including fabric and clothing.

But NCTR is really helping to develop and undertake important areas of research to examine how these nano particles work under different circumstances, how the human body responds, and to look at it under different conditions, different models, different products, and of course, working in partnership with others, but it is a unique resource.

Senator PRYOR. And my last question on nanotechnology—maybe my last question because I am out of time—is should the FDA have a regulatory science program on nano-toxicology.

Dr. HAMBURG. I think that we are undertaking important experiments in that arena. I think it probably needs to be developed as a full-fledged area of focus, and FDA clearly should be at the center of those activities in that as we see more and more products using this technology, we need to be able to fully assess the risks and the benefits and we need to have a strong, sound science base to enable us to make the most informed decisions possible.

Senator PRYOR. Thank you.

Thank you, Mr. Chairman.

GENERIC DRUGS

Senator KOHL. Thank you very much, Senator Pryor.

Dr. Hamburg and I talked about this issue before. Over the years, we have provided funding to speed approval of generic drugs because, as everybody knows, they save the consumer tons of money. Unfortunately, the backlog of applications awaiting approval continues to grow and at this point, we have no indication that it will slow down. The budget proposes a very slight increase for generic drugs, not enough to keep up with the increased workload and again proposes to create a user fee for generic drugs in order to offset the costs, which would speed up our ability to get these generic drugs approved.

Research shows that it is the first and second generic drugs coming to the market that save consumers the real money, and of those at FDA awaiting approval, how many of the pending applications, if approved, would be the first or second generic of their kind on the market?

Dr. HAMBURG. Of the pending applications, I believe that about 365 or so are first generics. I would be delighted to give you more specifics on the numbers of second generics. I do not have that information at hand. But it is the case that with the additional dollars that you have helped us get in recent years and what we hope to get going forward through a combination of budget authority and

user fees, that we will be able to make a significant dent in the pending applications and be able to continue to get these important products to people as quickly as possible.

You correctly note that they have had a huge impact. I was told that over the last decade, it has been about \$284 billion saved, and of course, people getting access to these drugs. So, it is a hugely important area.

[The information follows:]

FIRST AND SECOND GENERIC DRUGS

It is not possible to immediately determine which pending generic applications would be the first or second generics on the market. Whether a generic is first or second is based on the order in which it is approved and marketed. A number of factors can affect which drug is marketed first, making it difficult to identify which pending applications will ultimately become first or second generics. However, FDA makes every effort to ensure that generics are available to consumers as soon as possible. In most cases, a first generic is approved shortly after all relevant exclusivities have expired, and all relevant patents have expired or are successfully challenged.

GENERIC DRUG USER FEES

Senator KOHL. Yes, as you point out, it has been a tremendous savings, if we can just get these drugs to market. And the reason I say first and second, if a standard drug from a brand name company is priced at \$10, maybe the first generic comes out at \$8, but then the second generic might come out at \$4 or \$2 in order to get their share of markets. So, oftentimes it is the second generic that comes to market that really impacts the price of that product to consumers.

Do you support user fees?

Dr. HAMBURG. I do support user fees. I think that the user fees will enable our generic program to be much stronger and I think that it is increasingly important that we have a robust generic review program both because of the importance of these drugs to the American people, as we have been discussing, but also because our ability to review them is getting harder and harder. In a way, we are a victim of our own success. Number one, because the industry has really taken off, we are getting more and more applications. Believe it or not, we actually approve about two generic drugs per working business day at the FDA. So, it is a huge volume that comes before us.

And many of the generic drugs are part of this more globalized supply and manufacturing chain that we have touched on briefly. So, increasingly, in order to do the approvals, we have to go overseas to do inspections of the manufacturing plants, and that takes more time and money as well.

So, as we are seeing the generic industry really expanding and the challenge of the review process increasing because of this globalization—and in some cases, because of the complexity of the drugs that are coming before us, but mainly we are facing growing challenges and we need to meet them. I think that both industry and the public benefit. So, I think it is appropriate to have the program funded by budget authority and user fees.

Senator KOHL. Thank you.

Senator Blunt, go ahead.

Senator BLUNT. Well, we do have votes, and I may have some written questions. I would be interested in how big these user fees are for generics compared to the original certification of drugs.

Dr. HAMBURG. Well, we are just——

Senator BLUNT. If you had them, what are we talking about here?

Dr. HAMBURG. We are beginning to sit down at the table for the negotiations. The President's budget proposes, sort of targets a \$40 million user fee for generic drugs in fiscal year 2012.

[The information follows:]

GENERIC DRUG USER FEE

The fiscal year 2012 budget proposal calls for a generic drug user fee program of about \$40 million. In relation to the market for generic drugs, estimated at \$58 billion, according to the Generic Pharmaceutical Association, this represents a modest expense.

The economics of the generic drug market make it difficult to determine precisely what impact this \$40 million would have on the price of generic drugs. We note that this \$40 million is significantly less than the \$250 million user fee program which members of the generic drug industry have outlined in public meetings; any impact from the \$40 million user fee would therefore be significantly less than any impact resulting from the \$250 million user fee proposed by industry.

Senator BLUNT. If you have any studies on what impact that has on the prices of these drugs, and maybe it is over such a large number of drugs it is varied, but I would like to see that if you have that information. You know what I am asking? What impact do you think \$40 million of user fees would have on the price of drugs, and is there a way to differentiate that out?

Dr. HAMBURG. Okay. Well, we will take our best stab at doing that.

[The information follows:]

GENERIC DRUG PRICE IMPACTS

The Federal Drug Administration and the generic drug industry have only recently begun negotiations to discuss generic drug user fees. At this time, FDA does not know what type of fee structure will be established, let alone the amount of each fee. FDA's goal is to work with the industry trade associations to establish a program that promotes the timely review and inspection of the growing number of generic drug applications. Members of the generic drug industry outlined proposals at a public stakeholders meeting that would equate to about \$250 million in annual user fees. Given that sales of generic drugs are about \$58 billion, from the GPHA, such a user fee would represent less than 1 percent of sales.

By contrast, the prescription drug industry paid approximately \$459 million in fiscal year 2008, on 2008 sales of \$234 billion, according to a report by the Kaiser Family Foundation in 2010, also less than 1 percent of sales.

ADDITIONAL COMMITTEE QUESTIONS

Senator BLUNT. I would think that would be something we would want to know as part of the whole evaluation of what impact this has on the generic marketplace.

And I may have some other written questions, Mr. Chairman.

Dr. HAMBURG. Okay, delighted to take them.

Senator BLUNT. Commissioner, thank you for your knowledgeable answers today.

Dr. HAMBURG. Thank you very much.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR HERB KOHL

OVERALL BUDGET

Question. Please provide a priority list of the increased funding items you are requesting in the budget.

Answer. The Food and Drug Administration (FDA) is responsible for protecting Americans many times each day and through every stage of their lives. Our role in protecting public health is unique, and there is no one to backstop us.

With these principles in mind, the FDA fiscal year 2012 budget supports many urgent public health priorities. It contains the resources to achieve fundamental public health responsibilities entrusted to FDA. The budget recommends new resources for FDA to transform America's food safety and nutrition, speed the development of medical countermeasures to meet critical national security priorities, protect American patients, and advance the regulatory science that serves as the foundation for FDA public health decisions.

The initiatives and resources that FDA recommends for fiscal year 2012 will allow us to act more quickly and strategically to protect consumers from food safety threats and help deliver safer, more effective medical therapies to the American people. Fulfilling our responsibilities to the American public requires additional resources, as recommend in the fiscal year 2012 budget, across all of these priorities.

Like many Government executives, I am carefully watching the progress of the ongoing bicameral, bipartisan discussions between the administration and congressional leadership on the Nation's long-term fiscal picture. These discussions will likely affect the overall funding for Federal programs, the scope of many programs and the size of individual budgets. We look forward to working with you and others in the Congress as this process moves forward.

The administration is committed to making the difficult decisions necessary to reduce the deficit. However, we must do so in a way that safeguards the public health of Americans now and in the future. That is what FDA and its employees strive to do every day.

MEDICAL COUNTERMEASURES

Question. The budget for fiscal year 2012 proposes an increase of \$70 million for advancing medical countermeasures (MCMs). This is on top of a fiscal year 2011 request to use \$170 million in unspent pandemic flu money for these activities.

Can you talk a little bit about this initiative—it's a lot of money. What, specifically, will we be getting with this investment? Is the initiative scalable, and to what degree?

Answer. FDA plays a key role in facilitating development and availability of the Nation's MCMs. To successfully contribute and keep pace with the multibillion-dollar investments being made in MCM development by the National Institutes of Health (NIH), the Biomedical Advanced Research and Development Authority (BARDA) of the Office of the Assistant Secretary for Preparedness and Response, and the private sector, FDA needs funding to support its MCM Initiative. The fiscal year 2012 investment of \$70 million in the MCM is critical to successfully developing innovative, safe, and effective MCMs to counter identified chemical, biological, radiological, and nuclear (CBRN) threats and emerging infectious disease threats. The \$70 million investment is also essential to develop the capacity to rapidly develop MCMs in the face of new threats.

The fiscal year 2012 investment in the MCM will help to accelerate the pace and increase the probability of successfully developing MCMs for these threats. FDA will use the fiscal year 2012 funds in a number of ways. FDA will create and maintain a highly qualified workforce with the appropriate technical training, scientific skill, and subject-matter expertise to fully support FDA's MCM responsibilities. FDA will also improve the MCM infrastructure at FDA, such as laboratory equipment and information technology, so that our researchers and reviewers have the tools they need. FDA will establish multidisciplinary Action Teams that will work to establish clear, science-based pathways for evaluating and approving MCMs. FDA will expand FDA's regulatory science program to help overcome existing hurdles in MCM development and to facilitate the translation of scientific discoveries into MCMs. And, FDA will modernize agency regulations and policies to make the FDA evaluation and review process more efficient and to ensure that MCMs can be made readily available to the public when needed.

Regarding the question about whether the MCM is scalable, we recognize the budget challenges that the Congress and the Federal Government face. The FDA investment has been carefully designed and balanced to fulfill the resource needs for the activities that FDA must conduct and the performance that FDA must de-

liver. It has also been designed to sustain the MCM infrastructure and programs already under way and to continue and build on this critical work. If the Congress must scale its investment in MCM, FDA will determine how to make adjustments.

Question. Are there specific threats that you are working on that are greater than others?

Answer. Yes, FDA is fully engaged with its MCM Enterprise partners throughout the Federal Government to establish and maintain MCM programs and activities based on MCM Enterprise partner priorities based on anticipated.

The Department of Health and Human Services (HHS) prioritizes both the threats and the MCM programs to counter those threats. The highest priority threats include CBRN threats for which a Material Threat Determination has been issued by the Department of Homeland Security. Examples include anthrax, smallpox, botulinum toxins, and radiological nuclear threats. These have been determined to present a material threat against the United States population sufficient to affect national security. Pandemic influenza is also a high-priority threat.

The HHS review, "The Public Health Emergency Medical Countermeasures Enterprise Review", released in August 2010, envisioned the Nation's MCM Enterprise evolving from its current threat-specific approach to a flexible capability that can produce MCMs rapidly in the face of any attack or threat, known or unknown. As a result, FDA is also focusing on supporting the development of broad-based platform technologies in support of MCM Enterprise priorities that can offer scalable and flexible advantages over agent-specific MCM programs for high-priority threats.

Question. I know you've started working on some of this in earnest—what happens if you don't get the money you are requesting in fiscal year 2011 or fiscal year 2012?

Answer. HHS provided FDA with the funding to launch and begin implementing the MCM by allocating \$170 million from previously appropriated funds for pandemic influenza activities. The \$70 million budget request for fiscal year 2012 is designed to provide base funding for the MCM.

As already noted, the \$70 million fiscal year 2012 budget request for the MCM is designed to sustain the MCM and to enable it to keep pace with the multibillion-dollar investments ongoing at NIH and BARDA. If FDA receives less than the amount requested, the agency must limit its investment in the MCM, regulatory science program, and the full-time equivalents (FTEs) necessary to support the enhanced review process for MCMs. The risks of receiving a reduced amount include an inability to adequately implement FDA's MCM, which will ultimately degrade the ability of the MCM Enterprise to achieve its mission to protect the Nation from these threats.

The HHS review, "The Public Health Emergency Medical Countermeasures Enterprise Review", stressed that improving the regulatory environment for MCMs is critical to the success of the MCM Enterprise and is among the challenges the U.S. Government must address if it is to successfully develop MCMs. Moreover, investments in the MCM have implications for improving the health and security of the U.S. population beyond countering CBRN threats and emerging infectious disease threats. Investments to advance regulatory science to support development of MCMs will contribute directly and indirectly to development of products to treat other diseases and conditions and help improve the safety and efficacy of and access to FDA-regulated products.

PREGNANCY RULE

Question. An estimated 75 percent of all pregnant women use 4–6 prescriptions or over-the-counter drugs at some time during their pregnancy. It's widely acknowledged that information provided to pregnant women on drug labels is confusing at best. I know FDA has been working on this issue and even proposed a rule in 2008.

I understand that 73 comments were received on this proposed rule. Even if they are extremely complex, I can't see why I would take several years to go through 73 comments. Can you tell me the reason for the delay?

Answer. FDA staff have been reviewing the comments, identifying and considering the issues raised by the comments, determining whether any revisions should be made to the proposed regulation and preparing the final rule. FDA staff are continuing to work on the final rule. Because of the importance of this public health issue, FDA wants to proceed with the appropriate care and judgment.

Question. Is it a priority for FDA, and when do you think it will be finalized?

Answer. Publication of the final rule regarding prescription drug labeling for pregnant and lactating women remains a strong priority within FDA. FDA staff are actively working on the rule. Please be assured that FDA is committed to finalizing this rule as promptly as feasible and practical.

GENERIC DRUGS

Question. Dr. Hamburg, I ask about this every year. Over the years we have provided funding to speed approval of generic drugs. We do it because they save consumers and the Government significant money. Unfortunately, the backlog of applications awaiting approval continues to grow. And at this point, we have no indication that it will slow down. The budget proposes a slight increase for generic drugs—not enough to keep up with the increased workload, and again proposes to create a user fee for generic drugs in order to offset the costs. These user fees would allow you to collect more than \$40 million in fiscal year 2011.

To put the question in context, how many generic drug applications are pending at FDA right now?

Answer. There are approximately 2,400 generic drug applications pending. These pending applications include applications that are awaiting FDA's original assessment or review, applications that FDA found were not ready for approval and the company is preparing a resolution or response to address the FDA concerns, and applications awaiting re-review where companies submitted responses to deficiencies previously identified by FDA. This last category of applications is known as amendments.

Question. Research shows that it's the first and second generic drugs that save consumers the most money. Of those in the backlog, how many, if approved, would be the first or second generic of their kind on the market?

Answer. Our current tracking system does not allow us to identify pending generic applications as first or second generics. Whether a generic is first or second is based on the order in which it is approved and marketed. A number of factors can impact this order and factors can cause the order to shift with the passage of time. In addition, a first generic might be only one of the dosage strengths that the brand manufacturer makes, so the actual definition of first generic is not always clear. The Food and Drug Administration makes every effort to ensure that generics are available to consumers as soon as possible. In most cases, a first generic is, as with multiple generic drugs, approved shortly after all relevant patents and exclusivities have expired or the relevant patent is successfully challenged.

Question. And within those, how many could go on the market tomorrow, as opposed to those being delayed due to lawsuits, etc.?

Answer. As explained earlier, we cannot specify the number of pending first and second generic applications, and therefore, we cannot specify how many of those applications are not blocked by patents or exclusivities.

However, of the approximately 2,400 abbreviated new drug applications currently under review, about two-thirds are currently blocked from approval by patents or other exclusivities. Please note that applications waiting for expiration of patents or exclusivity to expire may be tentatively approved. A tentatively approved application has been found to meet FDA's rigorous approval requirements, and is ready to be marketed as soon as the innovator patent expires, the patent is successfully challenged, or all exclusivities expire. As a general matter, all patent or exclusivity issues related to the brand product or reference listed drug must be resolved before the generic product can be approved. Currently, there are 309 tentatively approved applications.

FOOD SAFETY MODERNIZATION ACT

Question. The Food Safety Modernization Act (FSMA), passed last year, was the largest expansion of FDA's authorities in 70 years. Obviously, the way food is produced, transported, stored, and consumed has changed since then, so this updated law was long overdue.

The Congressional Budget Office has estimated that it will cost \$1.4 billion over 5 years to fully implement this law. Your budget proposes an increase of around \$225 million for your Transforming Food Safety and Nutrition Initiative, which includes \$183 million for you to begin implementation. Will this amount fully fund FDA's first year costs for the new food safety law, and how much additional funding do you think you'll need over the next few years?

Answer. With the requested increase of \$183 million to implement FSMA, FDA expects to make substantial progress in building the science-based, prevention-oriented, and efficient food safety system mandated by the Congress. FDA plans to issue the key regulations required by FSMA, including produce safety standards, preventive controls in food facilities, and standards for preventing intentional adulteration. In addition, we would strengthen the scientific basis for the Foods Program, including the ability to make the design and implementation of our prevention standards more risk-based and effective in preventing food safety problems.

FDA plans to train FDA investigators in the latest inspection techniques that take advantage of the preventive controls regulatory framework. FDA will also build State capacity and create a national inspection work plan so that State inspections can be leveraged to meet FDA's domestic inspection frequency requirements.

FDA plans to design and implement a new import safety framework for carrying out the FSMA mandates. The new framework will include stronger importer accountability through the foreign supplier verification program, an accredited third-party certification program, comparability assessments to determine if foreign governments have food safety systems comparable to that of the United States, a voluntary qualified importer program to expedite review and importation of food by qualified importers, and expansion of the foreign inspection program. Finally, FDA will need to rely on better information technology to support more efficient domestic inspection and effective oversight of imports.

In future years, FDA will need to continue to invest in implementing these programs, including increasing FDA science capacity, strengthening the integrated food safety system, and implementing the import safety framework. We hope to work with the Congress to ensure that FDA has adequate resources to achieve our shared food safety goals.

Question. There have been statements made that this law isn't really necessary. Some people point to the recent decreases in the Centers for Disease Control and Prevention (CDC) estimates of the numbers of deaths and illness from food-borne illnesses. Particularly at a time when Federal spending is declining, how would you respond to those criticisms? Why do we need to spend this additional money right now, when we continue to have one of the safest food supplies in the world?

Answer. The revised CDC estimates still demonstrate a significant public health burden due to foodborne diseases with an estimated 48 million illnesses, affecting one in six Americans each year and resulting in 128,000 hospitalizations, and 3,000 deaths each year. It is true that the United States has one of the safest food supplies. For the most part, the food industry does a good job of providing abundant, safe food to American consumers. However, there has been a continuing series of food safety problems—major recalls, outbreaks, and illnesses—most of which are preventable. FDA FSMA, which gives FDA new tools to prevent foodborne illness, received the support of industry and consumer groups, as well as the Congress, and represents a consensus that improvements in the current system are necessary.

Question. How will these efforts help our economy? What is our return on investment?

Answer. Efforts to improve food safety through the prevention-focused framework envisioned in FSMA will result in fewer outbreaks of foodborne illness and more rapid response when they do occur. Outbreaks are costly to all involved—to consumers, to the food and feed industries, and to the healthcare industry. A 2007 study estimated the average hospital stay at 5.8 days for each case of foodborne illness requiring hospitalization. The same study estimated the average cost per case of foodborne illness at between \$16,100—for an adult—and \$26,700—for a child. In the case of the 2006 spinach recall, the Institute of Food Technologists estimated the cost of recalled spinach, lost sales, lost productivity, and other costs at \$129 million. Likewise, in the case of the 2008 Peanut Corporation of America (PCA) peanut product recall, one major manufacturer—Kellogg—estimated its costs to recall peanut-containing products at \$65 million to \$70 million. FDA expended more than 100 staff years—full-time equivalents—to protect consumers and conduct PCA-related inspection and recall activities. In the aggregate, the costs of foodborne illnesses and outbreaks are in the billions of dollars.

Question. How can you ensure that the produce safety regulations you are drafting will not follow a one-size-fits-all approach, which would harm small and organic growers?

Answer. FDA is aware of the tremendous diversity in farming operations and that a one-size-fits-all approach to produce food safety will not be practicable. Over the past year, FDA and U.S. Department of Agriculture (USDA) technical experts, scientists, and other staff participated in listening sessions and meetings in 13 States. In some of those States, we were able to tour large and small farms and speak with people who have the on-the-ground knowledge that FDA realizes must be reflected in the proposed rule. FDA is committed to providing operators with flexibility and innovation in their approaches to on-farm food safety for their operations.

FOOD SAFETY DUPLICATION EFFORTS

Question. The Government Accountability Office (GAO) recently issued a report on duplicative Government programs. Duplication in food safety across Federal agencies was a major theme in the report. Of the 15 agencies with oversight over

food safety activities, the FDA is in charge of 80 percent of domestically produced and imported food.

Since your agency has responsibility for the vast majority of the food we eat and in light of the fact that we just passed a massive food safety overhaul bill, can you please respond to the findings of the report regarding overlap in food safety activities?

Answer. The GAO report, “Federal Food Safety Oversight—Food Safety Working Group Is a Positive First Step but Governmentwide Planning Is Needed to Address Fragmentation,” highlighted the positive steps taken by the Federal food safety agencies under the auspices of the Food Safety Working Group (FSWG) to coordinate and collaborate on cross-cutting food safety issues, such as produce safety, salmonella contamination, and food safety performance measures. The report contained one recommendation for the Office of Management and Budget (OMB) to develop a Governmentwide performance plan for food safety. FDA continues to work through FSWG with its food safety partners to address a coordinated agenda of food safety issues as appropriate within our statutory frameworks.

Question. How often and how well do you work with the Food Safety and Inspection Service and other Federal, State, and local food safety agencies during an outbreak that would affect both agencies, and how can you improve?

Answer. FDA works with its State and local food safety partners during every outbreak of foodborne illness. FDA and its State and local counterparts are striving to improve how they work together on outbreaks. Efforts include cooperative agreements with States to form rapid response teams (RRTs). The RRT agreements allow the selected recipient to build State program infrastructure and rapid response capabilities for food and feed emergencies and implementation of the Manufactured Foods Regulatory Program Standards. This project engages partners to develop innovative programs and tools, both within each individual program and jointly among the nine pilot teams.

During the past 2 years, there have been three specific investigations in which FDA and USDA have had close, very positive collaborations—salmonella enteritidis in shell eggs, salmonella montevideo in spices used in deli meat, and salmonella enteritidis in liquid-/pasteurized eggs. In these investigations, FDA and USDA senior level and field level staff have planned the investigation, worked side by side in the field, shared laboratory resources, and coordinated closely on messages to consumers. Also, senior outbreak staff from FDA, CDC, and USDA now participate in 1- to 2-week orientation visits within each agency to better understand policies and procedures, and allow networking outside of emergency events. In addition, through FSWG, the Federal food safety agencies recently formed a group to improve how they work together during outbreaks. The agencies have formed a standing Multi-Agency Coordination Group for Foodborne Illness Outbreaks (MAC-FIO). MAC-FIO is comprised of a designated representative from each of the Federal agencies with food safety responsibilities, which allows for rapid coordination and communication during an outbreak that involves multiple Federal food safety agencies.

ADVANCING REGULATORY SCIENCE

Question. The budget includes an increase of \$49 million for your regulatory science initiative. Of this, nearly \$24 million is to pay for FDA staff to occupy a new lab.

What specifically will these funds be used for? Please provide a breakout of spending. Is this a top priority?

Answer. The Advancing Regulatory Science funding relating to White Oak are required to ensure that the new Life Sciences-Biodefense Laboratories and supporting facilities on the White Oak Campus are outfitted and operational to support critical FDA biologic and human drug research programs. Since these laboratories use select agents, they must undergo a highly specialized certification process before we can conduct research in these facilities to advance FDA’s mission. These funds will allow the testing and commissioning of state-of-the art laboratory equipment required for FDA science operations to support the following programs: annual and pandemic influenza, nonpandemic MCMs, blood and other biological products, biosimilars, and regulatory science. System testing and commissioning includes building automation system operation and monitoring, air flow tests, HEPA air filter tests, primary bio-containment device effectiveness, room pressurization control, and power tests. Funding will also allow FDA to provide for cabling and telecommunications equipment to support lab operations.

This is a top priority as the funding will allow FDA to demonstrate that all systems and standard operating procedures will provide environmental and biological

safety. We will be severely hampered in our ability to protect national security and world-wide public health if funding is not received as our existing laboratories are outdated and filled to capacity. In addition, FDA lab facilities would not be able to move to White Oak from National Institutes of Health and other locations and FDA would continue to pay approximately \$20 million in annual rent for existing facilities.

DRUG SAFETY

Question. Drug recalls have increased significantly since 2009, and there have been several high-profile cases of tainted drugs reaching the market. There have been many potential causes discussed for these increases. Some point to the high cost of manufacturing drugs, and cost-saving measures taken by manufacturers that lead to problems. Others point to manufacturers rushing too quickly to be the first company to submit an application, especially in the case of generic drugs. Another obvious concern is that 40 percent of drugs consumed in the United States are imported, while 80 percent of the ingredients used in U.S. drugs come from other countries, and these numbers continue to rise. Both you and your senior staff have said very recently that we continue to be at risk, and another drug safety problem is all but unavoidable. The budget includes an increase of \$56 million for the Protecting Patients Initiative, of which \$12 million is for import safety.

Can you talk specifically about this increase, and more generally about how you begin to address problems like this when increased funding is not a certainty?

Answer. The increased funding will be used to strengthen our multifaceted approach for leveraging different opportunities for additional knowledge of imported products and foreign manufacturers. As resources allow, we will continue to pursue our efforts to conduct additional foreign inspections, enhance our working relationships with international regulatory counterparts, and strengthen our foreign presence. FDA conducts inspections of foreign facilities that offer FDA-regulated products for import into the United States, and in some cases supplements information gathered during inspections with knowledge gained from foreign regulatory counterparts. In this regard, we continue to enhance working relationships and information-sharing with our international regulatory partners which, in turn, help FDA identify problem products before they are offered for import and enter U.S. commerce. Another important opportunity is FDA's acceptance into the Pharmaceutical Inspection Cooperation Scheme, whose primary goals are to foster the international development, implementation, and maintenance of harmonized Good Manufacturing Practice standards, and further the development of a quality system of inspectorates in medicinal products.

FDA is also participating in a pilot program with the European Medicines Agency on the coordination and performance of joint inspections. The overall objective is to see whether greater international collaboration can better distribute inspection capacity, allowing more sites to be monitored and reducing duplication. In addition, FDA's Office of International Programs has opened several foreign offices to further enhance FDA's ability to protect U.S. consumers from unsafe foreign-sourced products. Establishing a foreign presence reflects the evolution of FDA's regulatory strategy and its responsiveness to U.S. consumers in meeting its mission of public health protection.

An additional example of international collaboration includes the FDA's memorandum of understanding with the Health Products and Food Branch of Health Canada. This allows FDA and Canada to develop specific procedures for sharing of regulatory, emergency management, and public health information related to drug products. This can include information on quality defects or product recalls of therapeutic products manufactured or distributed in Canada, inspection reports, product samples, enforcement activities, product investigations, as well as information on facilities registered or authorized to market products.

PATIENT MEDICATION INFORMATION

Question. I understand that FDA has been working on a new process for producing consumer and patient medication information (PMI) that is included with patient prescription medication. This is due to a general belief that the current format can be confusing, and too much information can be included, which makes it less useful to consumers. This information is currently produced by private publishing companies. My understanding is that the current proposal would require each manufacturer to provide a consumer/PMI insert with each drug they produce, and the information would be limited to one page.

Concerns have been brought to my attention that requiring every drug manufacturer to independently produce this information could lead to inconsistent informa-

tion being provided to patients, and limiting the documents to one page could lead to the omission of important information. I have further been informed that FDA has stated they will not be able to provide oversight of these documents.

What is the current plan for modernizing the consumer and PMI? What was the thought process behind requiring each manufacturer to publish this information independently?

Answer. FDA's ongoing analysis of and plans for modernizing consumer and PMI are intended to achieve the goals of Public Law 104-180, enacted in 1996, which included specific targets regarding the distribution and usefulness of PMI. FDA-commissioned studies subsequent to the enactment of Public Law 104-180 have indicated that those statutory goals are not being met by current private sector efforts, and we are considering next steps.

Currently, documents are developed by drug manufacturers, other private organizations, or individuals and patients may receive several different types of information, developed by different sources. PMI may be duplicative, incomplete, inconsistent, or difficult to read and understand, and distribution is voluntary for certain types of PMI. The distribution of Medication Guides, in accordance with 21 CFR part 208 and some patient package inserts in accordance with 21 CFR 310.501 and 310.515 is mandatory as described in the regulations.

FDA has determined that the current system is not adequate to ensure patients receive essential medication information needed to safely use drugs. Based on recommendations from FDA's Risk Communication Advisory Committee and other stakeholder input, FDA sees merit in adopting the use of a single document with standardized content and format. FDA is working with all relevant parties, such as patients, healthcare providers, drug manufacturers, interested professional organizations, and PMI developers and publishers, to determine the appropriate regulatory path forward. For example, the Engelberg Center for Health Care Reform at the Brookings Institution is working with key stakeholders, including FDA, to conduct initial demonstration pilots, designed to evaluate feasibility of various PMI distribution channels and assess patient and provider PMI preferences.

FDA does not intend to limit production of PMI solely to drug manufacturers. Our goal is to establish standards regarding the content and format of PMI in order to increase the overall quality of the documents patients receive and hopefully enhance patient care through proper medication use. FDA is still considering how best to accomplish this goal, and has not finalized requirements for the procedural aspects surrounding the creation of PMI or the single page limitation. When making any determinations, FDA will consider all stakeholder input, including the comments received in your statement.

Question. Can you please address the concerns that have been brought to my attention?

Answer. We understand that concerns have been voiced that requiring every drug manufacturer to independently produce PMI could lead to inconsistent information being provided to patients, and limiting PMI documents to one page could lead to the omission of important information. To address those concerns, FDA is seeking public input and taking a scientific approach, including conducting research, as part of our decisionmaking process. FDA has developed three draft PMI prototypes to be used in consumer testing. The results of the consumer testing will inform FDA of the usefulness and various format options for PMI documents. FDA recognizes that FDA review and approval of all PMI documents prior to distribution may not be feasible given our resource constraints and the potential volume of products that may require PMI, perhaps as many as 22,000 products. FDA is considering developing standardized content and format requirements, which should enhance quality and accessibility of information in PMI, similar to the standardized labels on over-the-counter drugs and many food products, and should lead to improvements in patient care due to safer use of medications.

Question. Will there be rules regarding updating and streamlining information to make it easily understandable for consumers, which providing an appropriate amount of information? Will FDA provide oversight on these publications?

Answer. Yes, FDA intends to develop rules or guidance based in part on the outcomes of our testing and pilot projects. FDA has developed three draft PMI prototypes to be used in consumer testing. Based on public comment and expert panel input, FDA is also finalizing the design of the consumer testing study of the prototypes. Consumer testing will begin when the final study design is approved by OMB. The results of this study will inform FDA of the usefulness and various format options for PMI documents.

FDA intends to provide oversight of PMI documents, and is considering the best approach for doing so. Although one approach to oversight could involve FDA review and approval of all PMI prior to distribution, we recognize that this may not be fea-

sible given FDA's resource constraints and the potential volume of products that may require PMI—perhaps as many as 22,000 products when including all innovator and generic products.

Question. What is the timeline for this change?

Answer. Before implementing changes to PMI, the plan is for FDA to first study and test the utility of PMI prototypes. Approval by the White House OMB for this research is expected by July 2011 and results of the study are expected in 2012.

One option for implementing changes to PMI might be to develop a new rule. The timeframe for developing and finalizing a new rule at FDA varies, but the process can take a 5 years. Thus, implementation of a PMI rule would likely not occur prior to 2015/2016. During FDA's decisionmaking process, FDA plans to continue to study prototypes, research potential processes, and discuss and evaluate the impact of those potential procedures. FDA intends to continue to involve all interested stakeholders in these activities.

GENERIC FOR LIPITOR

Question. I understand that later this year, a generic for the blood pressure drug Lipitor will be eligible to enter the market due to patent expirations. The entry of generic competition to Lipitor has the potential to save consumers as much as \$6.7 billion.

Are you working to try to reach a decision as to whether to approve a generic drug application for Lipitor in a timely fashion?

Answer. Lipitor, which has the chemical name atorvastatin, is a drug used to treat high cholesterol. The FDA recognizes the benefits and value of making safe, effective, high-quality generic drugs, such as Atorvastatin, available to the American public. FDA is fully dedicated to doing so as quickly as possible within the framework of the law and applicable regulations.

QUESTIONS SUBMITTED BY SENATOR DIANNE FEINSTEIN

PROGRESS ON RESEARCH INTO BISPHENOL-A

Question. I remain particularly concerned about the use of bisphenol-A (BPA) in food containers, particularly those used to provide food and beverages to infants and children. Mounting scientific evidence demonstrates a link between BPA exposure, even at low doses, and a host of harmful health effects such as cancer, diabetes, behavioral disorders, and heart disease. This is why I have introduced legislation in the 112th Congress that would ban the use of BPA in baby bottles, sippy cups, infant formula, and baby food.

In January 2010, the Food and Drug Administration (FDA) released an "Update on Bisphenol A for Use in Food Contact Applications" (update) to explain your current perspective on BPA, including support for additional research and interim recommendations for public health.

In this update, you agreed with the National Toxicology Program (NTP) at the National Institutes of Health (NIH) and expressed "some concern about the potential effects of BPA on the brain, behavior and prostate gland in fetuses, infants, and young children." You also cited additional research being pursued by the FDA's National Center for Toxicological Research (NCTR), and the interim steps you would take to reduce exposure.

What progress have you made in your consideration of the low-dose toxicity studies and peer-reviewed studies of BPA?

Answer. FDA announced the availability of updated review documents on low-dose studies in a Federal Register Notice published on April 5, 2010. Since that notice published, FDA has continued to incorporate new published information and information from studies conducted at FDA's NCTR into our review of the safety of BPA in FDA-regulated products.

Question. What is the status of the research being conducted by the FDA's NCTR, including those studies being conducted in collaboration with NTP?

Answer. FDA's NCTR is conducting studies characterizing the toxicities of BPA in several animal models in partnership with NTP. Study designs are using both oral and intravenous routes of exposure. The results with oral studies are used to model dietary exposure while intravenous studies are used to model neonatal and infant exposure in a medical setting.

To date, the results of several studies have been published in the peer-reviewed scientific literature. Four studies were published that characterize systemic distribution and excretion patterns following oral and intravenous administration of BPA using rat and nonhuman primate models. Human biomonitoring data are also being

collected in conjunction with research partners, including FDA's Center for Devices and Radiological Health; the Centers for Disease Control and Prevention (CDC); and the Pacific Northwest National Laboratory. The animal study data and the human biomonitoring data will be combined into mathematical models to minimize uncertainties in estimates of human tissue exposures.

Several additional, longer-term exposure studies with BPA evaluating effects of in utero and neonatal exposures are in progress in rats, which include the effects on the brain structure and behavior. Additional long-term exposure studies are scheduled to begin in fiscal year 2012. These studies include a lifetime cancer bioassay, and an evaluation of factors related to diabetes and heart disease. All the studies have been designed to fill data uncertainties identified by FDA and NTP in order to assess potential impact of BPA on human health.

Question. What is the status of your consultations with other expert agencies including the NIH, the Environmental Protection Agency (EPA), the Consumer Product Safety Commission (CPSC), and CDC?

Answer. FDA included scientists from several other agencies including NIH, EPA, and CPSC in an external review of our most recent memorandum on low-dose studies of BPA. We continue to interact with Government scientists from all these agencies to better inform our safety assessment process. For example, FDA's on-going studies at the NCTR are being performed in collaboration with the National Institute for Environmental Health Sciences (NIEHS), as mentioned previously and FDA scientists have attended NIEHS BPA grantee meetings. In addition, in November 2010, FDA scientists participated with other U.S. Government scientists as well as international experts in a Food and Agriculture Organization (FAO)/World Health Organization (WHO)-sponsored consultation regarding the safety of BPA in food contact applications. One conclusion of the FAO/WHO consultation was that it would be premature to initiate public health measures based on current data.

Question. You cite support for the industry's actions to stop producing BPA-containing bottles and infant feeding cups in the U.S. market. What specific actions, if any, have you taken to express this support?

Answer. FDA announced its support for these actions in a January 10, 2010, announcement posted on FDA's Internet site. At that time, FDA announced that major manufacturers had stopped selling new BPA-containing baby bottles and infant feeding cups for the U.S. market since early 2009. FDA's contact with these industry members over the past year continues to confirm that BPA is not being used for the manufacture of infant feeding articles.

Question. You also cite the FDA is facilitating the development of alternatives to BPA for the linings of infant formula cans by working with manufacturers, giving technical advice on the approval of alternatives, and expeditiously reviewing new applications for alternatives. Please provide details of the efforts you have taken in this area.

Answer. FDA has worked with industry to increase our understanding of the different packaging materials currently used for infant formula and the types and quantities of infant formula packaged in these materials. At the present time nearly 90 percent of infant formula—primarily those that are powdered—sold in the United States is packaged in materials that are not manufactured using BPA. Over the past year, FDA has actively worked with industry on a wide range of alternative materials for liquid infant formula packaging. Because of the complexities in this market and the higher potential exposures to infants to these materials, FDA has provided substantial individualized guidance regarding the development of appropriate safety data to ensure safe use of replacement products. These efforts have been the subject of over a dozen presubmission applications, a tool FDA uses to communicate with industry prior to the formal submission process. Once an applicant submits a complete premarket submission is made to FDA, the review time is 120 days. We continue to work with the infant formula and packaging industries to bring safe alternative materials to the market.

NUCLEAR RADIATION AND ITS EFFECT ON OUR FOOD SUPPLY

Question. The tragic events that continue to unfold in Japan are having extraordinary consequences even within our own society. In addition to the earthquake's much publicized effect on gas prices and the price of consumer electronic goods, there is substantial concern about the safety of food produced in regions affected by the nuclear radiation emitting from the damaged power plants.

What extra precautions is the FDA taking to ensure that all food that has been exposed to high levels of radiation is either destroyed or decontaminated before it enters the U.S. market?

Answer. From the earliest days of the situation in Japan, FDA has been actively protecting United States consumers from potentially contaminated products; instituting import controls to ensure such products do not enter the United States marketplace, and adjusting those controls as circumstances warranted. These controls include the detention of specific products from prefectures reported by the Japanese Government as being found to contain radionuclides; and increased examinations and FDA analysis of other FDA-regulated products. These controls provide a blanket of coverage for FDA-regulated products from Japan. As this situation evolves, our targeted coverage is evolving.

As of today, March 17, 2011, FDA-activated electronic screening criteria to hold all lines of products manufactured or shipped by Japanese firms. This screening provides instructions to FDA's field offices when encountering shipments from Japan. The instructions include documenting review and disposition of all shipments from Japan based upon when the shipment left Japan. For those shipments that left Japan prior to March 11, no further action is required. Admissibility is determined as per normal procedures. For all lines shipped on or after March 11, if the shipment originated from an area outside of our areas of concern, admissibility is determined as per normal procedures. If the shipment originated from within the affected area, FDA investigators are instructed to check with local Customs and Border Protection (CBP) to determine if the shipment went through CBP's radiation screening. CBP will contact FDA if CBP has not screened the line or if CBP screening indicates adverse readings for the presence of radionuclide contamination.

If the importer of contaminated product does not voluntarily destroy or decontaminate the product, we will rely on CBP's seizure authority to take control of the product and ensure it is properly disposed.

Question. What steps is FDA taking to ensure that the elevated levels of radiation in the United States does not impact food production in California and across the rest of the country?

Answer. EPA is monitoring atmospheric radiation levels and collects environmental samples, such as rainwater, to monitor radiation and any increases that may occur due to the tragedy in Japan. Monitoring allows FDA to react swiftly in the unlikely event of significant amounts of radionuclides reaching our shores. So far, EPA's monitoring has detected only very low traces of radionuclides characteristic of a power plant accident. These levels do not present a public health concern. FDA has had a sampling program in place domestically for many years collecting samples of food products from areas around nuclear facilities to monitor any potential problems, including California and other States across the country. There have been no sample results from this program indicating harmful levels of radionuclides. We continue to keep abreast of EPA's monitoring to ensure that there is no threat to our domestic crops.

FOOD SAFETY BILL IMPLEMENTATION

Question. I strongly supported the passage of FDA FSMA last Congress because I believe that the FDA needs to move towards preventative model when it comes to protecting the safety of our food supply. I believe that all processors should have in place a Hazard Analysis and Critical Control Point (HACCP) plan, and I believe that we must fully enforce the requirement that these plans are in operation any time food is being produced.

However, produce farmers in my State that are concerned that FDA will take a one-size-fits-all approach when it comes to the implementation and approval of these food safety plans. I do not think that this would be in the best interest of safety, and it certainly would not be in the best interest of the food production industry.

What are you doing to ensure that HACCP plans will be product specific? What assurances can I give farmers in California that the FDA will not treat spinach HACCP plans, like almond or dairy HACCP plans?

Answer. We understand your question to relate to the produce safety standards required by section 105 of the FDA Food Safety Modernization Act. FDA is aware of the tremendous diversity in farming operations and that a one-size-fits-all approach to produce food safety will not be practicable. FDA is committed to providing operators with flexibility and innovation in their approaches to on-farm food safety for their operations. FDA intends to propose a rule containing requirements that will be commensurate to the hazards and risks associated with any particular operation.

ANTIBIOTIC IS FOOD PRODUCTION

Question. I remain concerned about the overuse of antibiotics in food animal production and FDA's slow response to address this critical public health matter. While

I was encouraged to see the FDA proposal in guidance for industry (GFI) No. 209 in June of last year, I have not seen or heard of any definitive progress since. I cannot underscore the importance of swift action in addressing this concern—in the last 10 years antibiotic resistant *E. coli* infections have risen by 16.5 percent, antibiotic resistant *P. mirabilis* infections have risen by 19 percent, and MRSA infections rose by 22.4 percent.

When will FDA offer a definitive plan of action on how to reduce the over- and misuse of antibiotics in food animal production?

Answer. FDA's action plan for promoting more judicious use of medically important antimicrobial drugs in food-producing animals began in 2010 with the publication of draft GFI No. 209. GFI No. 209, which, for the first time, lays out FDA's policy on the use of these drugs in animal agriculture provides two definitive guiding principles. The first principle is that medically important antimicrobial drugs should be used in food-producing animals only when necessary for assuring animal health. The second, that such use should include veterinary oversight or consultation. We believe that by communicating these key principles we have identified a clear pathway forward as we work with the animal health and animal agriculture industries to reduce the overuse and misuse of antibiotics in food animal production. FDA is close to completing review of comments received regarding draft GFI No. 209 and plans to finalize the guidance later this year.

However, while this was an important first step, the goal now is to put these principles into action. Since publication of GFI No. 209, we are very encouraged by the interactions we have had to date with key stakeholders, including the animal health industry, on plans for implementation. Sponsors of some of our most important antimicrobial drugs have already initiated discussions with FDA about updating their animal drug products in a manner consistent with the principles of GFI No. 209.

To further support implementation of GFI No. 209 principles, FDA intends to issue additional guidance which will provide more specific information for animal drug sponsors. In addition, FDA has initiated the rulemaking process to streamline the Veterinary Feed Directive System to facilitate the transition to veterinary oversight of the use of medically important antimicrobial drugs in feed. Work has already begun on both of these tasks and related publications can be expected sometime within the next year.

Question. If you intend to follow the general principals laid out in GFI No. 209, how will you define the term "nontherapeutic use of antibiotics"? Will the definition include prophylactic use of these drugs?

Answer. The intent of GFI No. 209 was to make a distinction between those uses of medically important antimicrobial drugs in food-producing animals that FDA considers judicious and those we consider injudicious. In this context, FDA believes those uses that are considered necessary for assuring animal health are judicious uses and those uses for production purposes in healthy animals, such as to promote growth or improve feed efficiency, represent injudicious use. As noted in the GFI, FDA considers uses that are associated with the treatment, control, or prevention of specific diseases to be uses that are necessary for assuring the health of food-producing animals. However, while FDA does believe that some prevention uses are necessary and judicious, we also believe it is imperative that such uses include veterinary oversight or consultation. Veterinary involvement in the decisionmaking process associated with the use of medically important antimicrobial drugs is an important aspect of assuring appropriate use, including judicious preventive use.

Question. It is also my understanding that the FDA intends on revisiting the Veterinary Feed Directive (VFD) program and the approval of new animal drugs under FDA GFI No. 152. What revisions to these documents are you considering and by when do you plan on making these recommendations public?

Answer. In March 2010, FDA published an Advance Notice of Proposed Rulemaking (ANPRM) regarding the VFD program. This action was taken in response to informal comments received by FDA that characterize the current VFD process as being overly burdensome. FDA is concerned that the VFD process in its current form may be difficult to administer in the future as the number of approved VFD animal drugs increases. Therefore, the goal will be to streamline the regulatory requirements where possible while still protecting public and animal health. The target date for publishing of specific proposals based on the comments we received on the ANPRM is planned for sometime during 2012. Of course, FDA's publication date can be affected by issues that emerge during the review and clearance process.

FDA believes that GFI No. 152 has provided an effective mechanism for evaluating antimicrobial resistance concerns as part of the new animal drug approval process. This GFI includes a table that ranks antimicrobial drugs with respect to their importance to human medicine. FDA has acknowledged that this listing may need to be periodically updated so that it reflects current conditions regarding anti-

microbial use in humans. FDA intends to seek public comments on any updates to the GFI prior to implementation.

QUESTIONS SUBMITTED BY SENATOR ROY BLUNT

USE OF VETERINARY DRUGS IN FOOD-PRODUCING ANIMALS

Question. The international body that establishes standards for food safety, known as Codex Alimentarius, is playing an increasing role in the facilitation of market access for U.S. agricultural products to a growing number of countries and customers around the globe. Standards set by Codex should be established based on scientific merit and be used to improve trade, not hinder it.

Specifically, the Codex Committee on Residues of Veterinary Drugs in Foods (CCRVD) has had a maximum residue standard for a Food and Drug Administration (FDA)-approved veterinary product, ractopamine, pending for the past 3 years. The adoption of this standard should move forward.

FDA chairs this particular Codex committee, what are your thoughts on the current process as it relates to this particular situation?

Answer. An FDA employee chairs the CCRVD and another FDA employee serves as the U.S. delegate to this committee. Proposed ractopamine maximum residue levels (MRLs) for cattle and swine have been advanced from this committee to the Codex Alimentarius Commission (CAC) for adoption. Adopting MRLs is pending at the CAC level. The U.S. Government is part of a small group of countries that have been meeting at the CAC level to resolve the ractopamine issue before the next CAC meeting. The U.S. delegation remains hopeful the deliberations will be successful and the recommended ractopamine MRLs will be finalized and adopted by the CAC as a Codex standard.

The U.S. delegation is committed to moving forward to adopt MRLs for ractopamine on the merits of the scientific evidence presented to Codex, without exemptions that would undermine the international Codex standard. The ractopamine MRLs have been recommended as safe after extensive review by the Joint Expert Committee on Food Additives (JECFA), an independent Food and Agricultural Organization/World Health Organization scientific body of recognized world experts. Adopting Codex MRLs for ractopamine is especially important for countries that do not have the resources to carry out their own risk assessments and rely on Codex MRLs. Other countries that do not have an MRL, but want to import from countries that enforce Codex MRLs can do so with confidence in the safety of the product.

Some countries are trying to block adoption of the ractopamine MRLs using arguments that include national interests, national laws, or preferences regarding product use. Blocking the ractopamine MRLs after they have been evaluated and deemed safe by JECFA undermines the ability of Codex to establish international food safety standards, and may set a precedent for discounting the advice of its scientific experts.

Question. How is FDA engaging within with our trading partners to ensure a science-based outcome of Codex meetings?

Answer. The FDA works very closely with the U.S. Codex Office in the U.S. Department of Agriculture (USDA) on all matters related to Codex. The U.S. Chair of CCRVD, and the U.S. Delegate to CCRVD are FDA employees and have been actively engaged with the U.S. Codex Office, the Foreign Agriculture Service, and the U.S. Trade Representative to reach out to other countries on this issue.

FOOD MARKETING GUIDELINES

Question. In December 2009, the Federal Trade Commission (FTC), FDA, USDA, and the Centers for Disease Control and Prevention (CDC) released a proposal for voluntary guidelines for food advertising to children and teens. These guidelines applied certain nutrition criteria to advertising during television programs that are viewed by children and teens. Some have complained that the proposal would prohibit the marketing of products that clearly fit within USDA and FDA's dietary guidelines.

To what extent was FDA involved in the development of these guidelines?

Answer. The committee reports that accompanied the 2009 Omnibus Appropriations Act included a provision calling for the establishment of an Interagency Working Group on Food Marketed to Children, made up of members from FDA, CDC, USDA, and FTC. The FDA representative to this working group was the Director of the Office of Nutrition, Labeling, and Dietary Supplements, at the Center for Food Safety and Applied Nutrition.

In 2009, the working group met and held conference calls. The FDA representative worked to ensure that the working group understood the FDA nutrition labeling requirements and policies, and the FDA representative drew upon the technical expertise of FDA staff as necessary.

The working group's discussions in 2009 on nutrition principles led to the development of the guidelines that your question refers to. Developing the tentative guidelines was the first phase of preparing a report to the Congress containing the working group's final findings and recommendations, as required by the committee reports that accompanied the 2009 Omnibus Appropriations Act. These guidelines were a tentative set of recommendations for voluntary nutrition principles. The voluntary principles were designed to guide industry self-regulatory efforts to improve the nutritional profile of foods that are most heavily marketed to children.

These tentative guidelines were made public at a forum hosted by the FTC in December 2009, entitled "Sizing Up Food Marketing and Childhood Obesity." At the forum, the FDA representative joined representatives from the other participating agencies to discuss the standards that the working group had tentatively agreed to. Throughout 2010, the working group met to refine the voluntary nutrition principles based on comments provided at the public forum and based on newly issued nutrition reports. Once again, the FDA representative and staff worked to ensure consistency with existing nutrition labeling requirements and current Federal nutrition policy. The continuing discussion of the working group has led to the development of a report on a set of proposed nutrition principles published for comment on the FTC Web site on April 28, 2011.

Question. Are you aware of any scientific study that directly links television advertising to obesity?

Answer. The Interagency Working Group evaluated research related to associations between television viewing, including advertisements, and childhood obesity. At the forum hosted by FTC in December 2009, the CDC representative to the working group, from CDC's Division of Nutrition and Physical Activity, provided data in his presentation from research on television viewing and links to childhood obesity. The CDC representative noted that although there is some evidence to suggest an association between television viewing and childhood obesity, the Institute of Medicine, part of the National Academies of Science, has concluded in a report entitled "Food Marketing to Children and Youth" that there is insufficient evidence of a causal relationship between TV advertising to obesity. The primary objective of the Working Group has been the promotion of children's health through better diet, with particular, but not sole, emphasis on reducing the incidence of childhood obesity. The proposed recommendations are therefore designed to encourage children, through advertising and marketing, to choose foods that make a meaningful contribution to a healthful diet and minimize consumption of foods with significant amounts of nutrients that could have a negative impact on health or weight.

Question. Would these guidelines prohibit the marketing of foods that you would define as healthy?

Answer. Neither the tentative guidelines on the recommendations for voluntary nutrition principles issued in December 2009 nor the report on the proposed nutrition principles that issued in April 2011 prohibit the marketing of any foods. The nutrition principles in each document contain recommendations related to advertising practices to guide industry efforts to improve the nutritional profile of foods marketed directly to children and to tap into the power of advertising and marketing to support healthful food choices. Such recommended principles should not be interpreted as a substitute or a replacement for any of FDA's food labeling regulations or a change in Federal dietary guidance for industry (GFI).

The final product of the working group will be a report to the Congress containing recommendations for voluntary nutrition principles for industry to consider in advertising practices and not regulations promulgated by the agencies. Therefore, any guidelines from the working group would not prohibit the marketing of any foods.

GENERIC DRUG REVIEW

Question. Since the fiscal year 2008 appropriation, funding for the Office of Generic Drugs (OGD) has increased by 23 percent. However, during this same time period, the median approval time for generic drugs has gone from 18.89 months to more than 26 months.

How do you explain this decline in performance?

Answer. FDA used the increased resources to hire more reviewers. However, it takes several months to train new reviewers and even longer before new reviewers become fully productive.

In addition, the new and experienced reviewers are dealing with more complex new drugs that are becoming eligible for generic competition. Therefore, more time is required to review and approve the generic drug versions. Also, more resources are required to develop recommendations and GFI to address complex products.

The number of new generic drug applications submitted to FDA remains at a high rate of more than 800 per year, compared to just more than 300 per year a decade ago. Complicating the review is an increase in the number of new companies, often relying on overseas manufacturing and bioequivalence testing sites. Approval of applications from new companies often takes longer as the new companies are less familiar with FDA requirements.

This review effort makes up only part of the median approval time. The other part is time that the applications are with the firm to address deficiencies raised during review. More than 90 percent of the original generic drug submissions are found deficient. The companies must address these deficiencies before they can gain approval. The responses from companies are not always timely due to the companies' own priorities. Furthermore, there may be multiple review cycles before approval.

Finally, other postapproval activities compete with FDA's efforts to review generic drug applications. There are many more marketed generic drugs products now than ever before. These products must be monitored to assure the safety of American patients. For example, any change to an already-approved generic drug must be reported to FDA's OGD. The growing workload to evaluate these changes competes with the workload of new generic drug application review.

Question. Specifically, what have we been getting for our investment in generic drug review?

Answer. The following is a brief summary of just a few of the benefits of the generic drug review program. For the decade 2000 through 2009, according to a publication from the Generic Pharmaceutical Association, the use of generic prescription drugs in place of their brand-name counterparts saved the Nation's healthcare system more than \$824 billion. In fiscal year 2009 alone, the use of FDA-approved generics saved \$139.6 billion.

It is estimated that more than 20 percent of all the drugs products on the market are only available in generic form. Therefore, generic drugs play a role in augmenting the supply and sources of drug products for national emergencies.

In fiscal year 2010, 565 generic drugs were approved or tentatively approved. In fiscal year 2010, the OGD took 2079 actions on original/new generic drug applications. These exceeded estimates for the program.

As of March 2011, OGD has posted more than 800 product-specific bioequivalence draft GFI documents, including more than 150 that have been finalized after considering public comments. Approximately 15–30 new GFI documents are posted every quarter. The information that FDA posts has been responsible for an approximately 75-percent reduction in the number of bioequivalence inquiries during the past 3 years. This timely and transparent provision of bioequivalence recommendations allows all interested parties equal access to information, and OGD believes the overall quality of submissions has improved.

MEDICAL DEVICE REVIEW

Question. Recently, medical device manufacturers have complained that FDA's review process is expensive and unpredictable which leads to costly delays in approval. Many United States-based device companies have indicated that it makes far more financial sense to apply for approval and market new medical devices in Europe than in the United States. This has led some to worry that this sector would relocate to other countries and focus more intently on developing new products for marketing in other countries.

Given that FDA missed 30 percent of its device review goals for fiscal year 2009, I wonder if there is any credence to this concern.

What is your response to this industry complaint?

Answer. Overall, FDA is meeting or exceeding the Medical Device User Fee Act (MDUFA) performance goals for more than 95 percent of the more than 4,000 annual device applications subject to these goals. For example, under the 510(k) program—the pathway used by 90 percent of the devices we examine each year—FDA completed 90 percent of our reviews in 90 days or less, which met the applicable goal. FDA also completed 98 percent of our reviews in 150 days or less, just as we committed to under MDUFA. For most of the goals FDA is not yet meeting, our performance has been steadily improving. FDA published more detailed performance information in FDA's fiscal year 2010 MDUFA Performance Report to Congress.

The model of the European Union (EU) has important limitations. Unlike the United States, the EU does not require that a device be shown to be effective. More-

over, decisions to approve a device in the EU are made by private companies, called Notified Bodies. There are more than 70 from which a manufacturer can select and to whom it pays a fee. Notified Bodies are subject to variable amounts of oversight. The information on which Notified Bodies make an approval decision is not made available to the public. In addition, it is difficult to compare the United States and EU systems because, unlike in the United States, the EU does not have a centralized, publicly available database of review performance, summaries of approval decisions, or important measures of safety, such as adverse event reports.

The European Commission has recognized that the EU model does not always offer a uniform level of protection of public health. As a result, it has sought comment on proposals to change the EU model. FDA believes that the best approach is not to replace the U.S. model, which has served the American public well, but rather to make the U.S. model more robust. With this goal in mind, in January 2011 FDA announced 25 actions we will take this year to make our premarket review programs more predictable, consistent, and transparent. As a further effort to make the U.S. model more robust, in February we announced our Innovation Initiative to help bring breakthrough technologies to patients more quickly.

Question. Could you be doing more outreach with device manufacturers during the review process to increase review certainty?

Answer. FDA currently conducts interactive reviews on many submissions. As part of the Medical Device User Fee Amendments of 2007 (MDUFA II) negotiations, FDA agreed to continue to incorporate an interactive review process. The commitment letter for MDUFA II states:

“The agency will continue to incorporate an interactive review process to provide for, and encourage, informal communication between FDA and sponsors to facilitate timely completion of the review process based on accurate and complete information. Interactive review entails responsibilities for both FDA and sponsors.”

In response to this commitment, FDA has developed GFI titled, “Interactive Review for Medical Device Submissions: 510(k)s, Original PMAs, PMA Supplements, Original BLAs, and BLA Supplements.”^{1,2} We also added an interactive review log in the Center Tracking System database and trained Center for Devices and Radiological Health and Center for Biologics Evaluation and Research staff on interactive review with sponsors.

In addition, as reflected in the public meeting minutes, FDA has proposed to industry during the Medical Device User Fee Amendments of 2012 (MDUFA III) negotiations to further enhance interactive review by making mandatory the tracking of interactive review and by establishing interaction goals for premarket notification, or 510(k), submissions and for premarket approval submissions. The proposal also included identifying best practices and incorporating them into a Good Review Management Practices GFI.

COUNTERFEIT DRUGS

Question. This week, you were on 60 Minutes discussing the \$75 billion counterfeit drug industry. During this interview, you stated that the agency does not know the extent to which counterfeit drugs have entered the domestic drug supply, but that you are aware that 30–50 percent of important drugs for public health in certain countries are counterfeit.

What would it take to get a handle on counterfeit products in the domestic drug supply?

Answer. Addressing the challenge of counterfeit drugs is an important challenge and FDA uses a multifaceted approach to address this challenge. Counterfeiters take steps to avoid detection so it is very challenging to determine the prevalence of counterfeit drugs in the domestic drug supply. FDA can only quantify those events that we discover. FDA believes the U.S. drug supply is one of the safest in the world due to the closed distribution system and we rely on global estimates and reports to gauge the relative risk to U.S. consumers.

FDA uses a multilayered approach to minimize the risk of counterfeit drugs entering the United States and to protect the U.S. drug supply. FDA works closely with supply chain stakeholders to secure the product, the supply chain, and distribution of the product by engaging in public outreach and education, coordinating regulatory actions with State and other Federal agencies, cooperating internationally, conducting criminal investigations, and enhancing enforcement.

A robust track and trace system could help decrease the opportunities for diversion and counterfeiting by allowing distributors and pharmacies to authenticate

¹ PMA refers to premarket approval.

² BLA refers to biologics license application.

product origin and supply chain by ensuring that a drug was handled only by legitimate entities. FDA is working to develop such a system, but implementation by the drug supply chain is essential to its success.

FDA collaborates with many State and Federal agencies, in addition to international law enforcement and regulatory bodies to combat counterfeit drugs. FDA's Office of Criminal Investigations (OCI) works to identify counterfeit drug manufacturing locations, and prosecutes those responsible for the manufacturing and distributing of counterfeit drugs.

Drug counterfeiting is a global problem so FDA is tackling this issue internationally by actively working with the World Health Organization and other private and public sector partners to develop tools, implement strategies, and take action to prevent and detect counterfeits that threaten the global marketplace and U.S. consumers.

Question. Do you work with industry to find these products?

Answer. FDA collaborates with industry to identify counterfeit drug products and warn the public once the products are identified. FDA's OCI collaborates with industry on a regular basis regarding illegal drug products, including counterfeit drugs. An example of this collaboration occurred last year when GlaxoSmithKline (GSK) received several reports of suspected counterfeit over-the-counter weight-loss product from consumers and GSK notified OCI. GSK worked with FDA to quickly identify the counterfeit product, warn the public about the danger of the counterfeit since it contained the wrong active ingredient, and educate consumers on how to distinguish counterfeit products from the authentic products. FDA issued two press releases with important information for consumers which assisted them in protecting themselves from buying or taking a counterfeit product. Additionally, OCI successfully identified and prosecuted those responsible for manufacturing and distributing the counterfeit product.

FDA also has a Counterfeit Alert Network (CAN) a coalition of health professional and consumer groups. This network also includes associations that represent distributors and pharmacies. Participants in the network agree to develop educational information and to rapidly disseminate important information about confirmed counterfeit products to their members. The CAN is another way for FDA to engage other parts of the drug supply chain and share information with healthcare professionals and consumers so they can identify counterfeit products.

Question. Would you agree that before we move forward with any proposal to allow Americans to buy drugs from other countries, we should demonstrate that we can do so safely and do so without increasing the chances that Americans may get a contaminated or potentially dangerous or counterfeit medication?

Answer. FDA's main concern with the importation of prescription drugs is patient safety. Many of the drugs currently being illegally imported are not FDA-approved and come from unknown sources and foreign locations that may not be manufacturing the products in accordance with FDA regulations. In addition, these products may be counterfeit or may contain potentially harmful ingredients. FDA does not have the same information for drugs produced and approved for foreign markets or that are manufactured in foreign facilities not inspected by FDA as we do for products approved and manufactured for the U.S. market.

Expanding the purchase of drugs from other countries would provide additional opportunities for counterfeits and other substandard or contaminated products to enter into the U.S. supply chain. FDA continues to identify appropriate compliance, enforcement, and information technology tools to monitor and address unapproved or otherwise illegally imported drugs. FDA is also developing a risk-model associated with importation to identify and minimize the risks to consumers, drug quality, and the supply chain. In addition, FDA is analyzing and assessing potential policies and operations that could reduce the risks from allowing foreign-approved drugs into the United States. This assessment includes exploring policy options that strike a balance between providing adequate safety measures and reducing costs to patients.

FDA MODERNIZATION

Question. In February, The Financial Times reported that, "Barack Obama has warned that the U.S. Food and Drug Administration is a candidate for a sweeping revamp amid complaints that it is ill-equipped to handle biotechnology and advances in medicine. I've gotten a lot of commentary about the fact that . . . essentially their model was designed for the kind of medical devices you see in museums," the president said in remarks before a new panel on jobs and competitiveness. While he was short on details, Mr. Obama singled out the FDA as an agency that ought to be modernized".

What changes has the President specifically asked you to initiate?

Answer. The President has directed agencies to review regulations and other procedures to see if they can withdraw or modify regulations, or otherwise improve procedures, to reduce regulatory burden and improve competitiveness, innovation, economic growth, and jobs, while assuring safety. FDA has identified improvements to regulatory science as well as other initiatives—such as its Medical Device Innovation Initiative, the 510(k) Plan of Action, and the voluntary pilot program by FDA and the Centers for Medicare & Medicaid Services—also referred to as Parallel Review of Medical Devices—that will help it and the industries it regulates innovate and remain competitive.

FDA has also identified regulations for revision and is continuing its review of its rules and procedures to identify additional opportunities. For example, FDA recently revised its biologics regulations to permit approval of exceptions or alternative to the regulation of constituent materials. This action recognizes advances in the development and manufacture of safe, pure, and potent biological products that, in some instances, render the existing constituent materials regulation too prescriptive and unnecessarily restrictive. FDA will maintain its ongoing review of device classifications to determine whether devices can be classified to a lower level, which reduces burdens on industry while maintaining product safety and efficacy. FDA is also revising its device adverse event reporting requirements to convert to a more efficient paperless, electronic system. In addition, FDA is pursuing initiatives to permit electronic submission of clinical trial data and other information related to drugs and medical devices, which will create efficiencies for both industry and FDA.

ADVISORY PANELS

Question. At advisory panel meetings, FDA reviewers often instruct the panel on the standards that apply for assessing the safety and effectiveness of the product at hand. It appears that in the context of certain advisory panel presentations, FDA reviewers have put forward standards that differ from regulations and applicable binding agreements.

What procedures are in place to ensure that FDA review teams' presentations to panels comply in every respect with the regulations and applicable binding protocol agreements?

Answer. FDA presentations at panel meetings undergo multiple levels of review by scientific and supervisory staff to ensure that statements made by FDA are factually correct. FDA provides information that will be presented at the meeting to the sponsor of the product under review. Sponsors may suggest corrections, clarifications, or edits to these materials in advance of the meeting.

Question. Does a product sponsor have any recourse if the review staff's presentation to an advisory panel provides incorrect information to the panel regarding the standards of safety, effectiveness, or the terms and obligations under a binding protocol agreement?

Answer. In advance of a panel meeting, the product sponsor has the opportunity to comment on the review staff's presentation if they have any concerns. During the meeting, the sponsor may make a request to address the panel with any concerns it may have related to the material presented by FDA.

BLOOD TESTING

Question. I understand FDA is considering whether to require all blood donations for human transfusion be screened for hepatitis B virus (HBV) using nucleic acid testing (NAT). The last public discussion on this issue took place at the April 2009 meeting of FDA's Blood Products Advisory Committee (BPAC).

What is the agency's current thinking is regarding an HBV NAT mandate?

Answer. FDA is evaluating and considering the required testing of blood for transfusion using HBV NATs. FDA currently requires that blood for transfusion be tested for HBV surface antigen and antibody to HBV core antigen. FDA brought the issue of testing of human blood for transfusion by HBV NAT to BPAC on April 1, 2009. The committee discussed scientific issues related to the risk of HBV transmission by blood for transfusion. The committee supported routine HBV NAT for blood donations, and establishment of a minimum sensitivity standard for the test. Currently, multiplex nucleic acid assay systems that simultaneously detect human immunodeficiency virus (HIV), hepatitis C virus (HCV), and HBV are in widespread use for testing blood donations. Therefore, because HIV and HCV NAT are required by FDA for testing blood donations, HBV NAT is also already widely performed to test blood for transfusion.

Question. Is FDA preparing to issue GFI regarding this topic?

Answer. FDA is considering issuing draft GFI for public comment on the use of HBV NAT to test both blood for transfusion and Source Plasma for further manufacture into derivatives.

DIABETES AND OBESITY DRUGS

Question. I understand FDA is now requiring additional clinical trials, including cardiovascular (CV) studies, for new diabetes and obesity drugs.

What is the agency doing to ensure that changing product requirements do not get in the way of making better therapies available to patients?

Answer. For diabetes drugs, new concerns have recently been raised regarding the CV safety of drugs to treat diabetes. In May 2007, a meta-analysis of clinical trials of the diabetes drug, Avandia, also referred to as rosiglitazone, was published that suggested an increased risk of heart attacks in patients taking this widely used drug. The controversy surrounding the meta-analysis and other data on the CV safety of diabetes drugs were discussed at several public advisory committee meetings. In July 2008, FDA held a 2-day advisory committee meeting to seek advice from a panel of experts in the field of endocrinology, cardiology, statistics, and drug safety on the extent of assessment of CV safety that should be required of new therapies to treat type-2 diabetes mellitus (T2DM). The panel, by a majority of 14-to-2, voted in favor of requiring a prospective assessment of CV safety prior to approval. Subsequently, in September 2010, FDA announced that it would restrict the use of Avandia in response to data suggesting an elevated risk of cardiovascular events by requiring a restricted access program under a risk evaluation and mitigation strategy. In December 2008, FDA issued GFI titled, "Diabetes Mellitus—Evaluating CV Risk in New Anti-diabetic Therapies to Treat T2DM." This GFI articulates FDA expectations for CV safety assessment of new drugs to treat T2DM. Under this GFI, collection of controlled data of new anti-diabetic therapies for at least 2 years is anticipated.

Regarding obesity drugs, in February 2007, FDA issued a draft GFI entitled, "Developing Products for Weight Management." The recommendations provided in the 2007 draft GFI document continue to guide the development of novel obesity drugs. Significant safety issues with three recently reviewed obesity drugs—Qnexa, Lorcress, and Contrave—led FDA to request that the drug sponsors conduct additional studies. In one case, FDA requested that a cardiovascular safety study to provide for a more complete benefit-risk assessment.

Question. What has FDA's performance, in terms of months to review and number of review cycles, been for diabetes and obesity drugs?

Answer. Since the diabetes GFI was issued in December 2008, FDA has approved three new molecular entity new drug applications (NDAs), submitted for the treatment of T2DM. Of these three NDAs, two were approved within their Prescription Drug User Fee Act goal dates for FDA to complete its review and take an action. All three NDAs were approved during their first review cycle.

Since 1999, four NDAs for prescription obesity drugs have been submitted to FDA. Qnexa, Lorcress, and Contrave were all reviewed within one review cycle and were acted upon within 10 months of submission. In addition, the drug Rimobabant was reviewed within 10 months of initial submission in 2005 and was undergoing a second review cycle when the sponsor withdrew the application.

The prescription obesity drug, orlistat, was approved in 2007 for use without a prescription. The nonprescription application was approved following an initial 10-month review cycle and a subsequent 6-month review cycle.

QUESTIONS SUBMITTED BY SENATOR JERRY MORAN

ANTIBIOTICS IN FOOD PRODUCTION

Question. As discussed by the Food and Drug Administration (FDA) in draft guidance for industry (GFI) No. 209, "The Judicious Use of Medically Important Antimicrobial Drugs in Food-Processing Animals," antibiotic drugs, and the drugs' labeled uses, are approved on an individual basis, utilizing a drug-specific risk assessment. In the draft GFI, the FDA states that before withdrawing a previously approved use of an approved drug, Federal law requires the FDA to demonstrate that "new evidence . . . shows that a drug is not shown to be safe under the approved conditions of use." Then, once the FDA meets this initial burden, under Federal law, the drug sponsor is entitled to demonstrate the drug is still safe for its intended use. Despite this Federal mandate, it appears that FDA is trying to generally ban the use of antibiotics for growth promotion, feed efficiency, and certain types of preventive treatment through the draft GFI. However, the draft GFI makes no finding

in regard to a specific animal drug. Furthermore, the studies cited by the draft GFI are dated and generally confirm no direct link between antibiotics used for growth promotion, feed efficiency, and certain types of preventive treatment and risk to human health. Has FDA made any specific findings on individual, previously approved drug applications that demonstrate that animal “production uses” of a specific drug should be withdrawn based on new evidence that the drug is no longer safe under the approved conditions for use? If so, how many and for which drugs has it made such a finding?

Answer. No, FDA has not yet made such a finding regarding any individual, previously approved new animal drug application.

Question. In draft GFI No. 209, “The Judicious Use of Medically Important Antimicrobial Drugs in Food-Processing Animals,” the FDA states that rather than follow statutory procedures to withdraw an approved drug use, the FDA will sometimes address issues through an informal process where it convinces a drug sponsor to voluntarily withdraw an approved use.

Which drug sponsors of animal antibiotic drugs is the FDA, through an informal process, currently trying to persuade to withdraw approved uses of antibiotics for animal growth promotion, feed efficiency, and preventive treatment? Of these drug sponsors, which approved animal antibiotic drugs are implicated in the informal withdrawal process?

Answer. As discussed in draft GFI No. 209, the focus of FDA’s concerns are on the use of medically important antimicrobial drugs in food-producing animals for production purposes, such as to promote growth or improve feed efficiency. FDA considers uses that are associated with the treatment, control, or prevention of specific diseases, including administration through feed and water, to be uses that are necessary for assuring the health of food-producing animals.

Currently, FDA is conducting outreach to the animal health industry on this issue. Since publication of draft GFI No. 209, we have been very encouraged by the interactions we have had to date with key stakeholders, including the animal health industry, on plans for implementation. Sponsors of some of our most important antimicrobial drugs have already initiated discussions with FDA about updating their animal drug products in a manner consistent with the principles of draft GFI No. 209. Regarding which specific animal drug products are in most need of updating, FDA intends to issue additional GFI, which will provide more specific information on this topic and allow stakeholders the opportunity to comment on it.

Question. Once draft GFI No. 209 is finalized, which drug sponsors is the FDA, through an informal process, planning to persuade to withdraw approved uses of antibiotics for animal growth promotion, feed efficiency, and preventive treatment? Of these drug sponsors, which approved animal antibiotic drugs are implicated in the informal withdrawal process?

Answer. As previously noted, the focus of FDA’s concerns are on the use of medically important antimicrobial drugs in food-producing animals for production purposes, for example, to promote growth or improve feed efficiency. FDA considers uses that are associated with the treatment, control, or prevention of specific diseases, including administration through feed and water, to be uses that are necessary for assuring the health of food-producing animals. Also as noted previously, FDA intends to issue additional GFI, which will provide more specific information on this topic including identifying which specific drugs or drug classes are subject to the recommendations outlined in draft GFI No. 209.

Question. What is the FDA’s timeline for publication of the final GFI for draft GFI No. 209, “The Judicious Use of Medically Important Antimicrobial Drugs in Food-Processing Animals”?

Answer. Once review of the comments received on draft GFI No. 209 is complete, FDA plans to issue final GFI implementing draft GFI No. 209. FDA is still developing a timeline for issuance of the final GFI No. 209. In addition, FDA continues to work collaboratively with other agencies and FDA stakeholders to develop sound strategies for implementing the recommendations outlined in the draft GFI.

Question. Has the FDA reviewed and responded to all of the submitted comments to draft GFI No. 209, “The Judicious Use of Medically Important Antimicrobial Drugs in Food-Processing Animals”?

Answer. FDA is nearly finished reviewing the comments received regarding draft GFI No. 209. FDA is using the comments to assist in development of the final draft GFI No. 209.

The FDA has requested an increase of nearly \$326 million to fund its Food Safety and Nutrition activities associated with implementation of the FDA Food Safety Modernization Act (FSMA). I am concerned about how FDA plans to use these funds to create on-farm production standards and traceability rules.

Question. First, I would like to know whether the FDA will abide by the law's exemption from on-farm production standards and traceability rules for grain commodities and livestock and not interfere with on-farm decisions made by producers of these agricultural products.

Answer. FDA FSMA contains numerous provisions requiring FDA to develop more than 50 new regulations, GFI documents, and reports to the Congress. As FDA is in the process of developing the required regulations, it is too soon to be able to provide specificity about the new requirements. However, I can assure you that, as we move forward, we will certainly be mindful of any exemptions contained in the statute. We also are committed to continuing to engage all our stakeholders to gain the information needed to inform our rulemaking activities and to help the affected industry implement the new food safety requirements.

Question. Second, I would like the FDA to explain how it plans to set on-farm production standards for fruits and vegetables. Is FDA planning on promulgating broad, flexible standards that defer to the expertise of the individual producer or is FDA planning to promulgate specific production standards that restrict producer flexibility and ultimately hamper on-farm innovation?

Answer. FDA is aware of the tremendous diversity in farming operations and that a one-size-fits-all approach to produce food safety will not be practicable. FDA is committed to providing operators with flexibility and innovation in their approaches to on-farm food safety for their operations. FDA intends to propose a rule containing requirements that will be commensurate to the hazards and risks associated with any particular operation.

Question. During the hearing on March 17, 2011, Commissioner Hamburg noted that she recently appointed a new director for the FDA Office of Foods and plans to hire additional personnel to assist in implementation of on-farm production standards and traceability under the new authorities granted by FDA FSMA. Does FDA plan to hire individuals with production agriculture experience and education? For instance, does FDA plan to consider hiring personnel with a degree in agronomy or other applied agricultural science degrees?

Answer. The authorities granted to FDA under FSMA cover many disciplines in the area of food safety, including production agriculture. FDA currently has staff whose expertise is production agriculture and with degrees in agronomy. FDA is committed to hiring subject matter experts from any field relevant to its needs, which would include consideration of individuals with degrees in applied agricultural sciences.

CONCLUSION OF HEARINGS

Senator KOHL. Thank you very much, Senator Blunt.

And Commissioner Hamburg, you have been great. You have been very informative. We have had a good discussion on many issues. I am sure you are looking forward to following it up with us.

Dr. HAMBURG. Yes. Thank you so much.

Senator KOHL. Thank you very much.

The hearing is recessed.

[Whereupon, at 2:58 p.m., Thursday, March 17, the hearings were concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]